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ABSTRACT

Focusing on the school district's written expectations for students, this document examines curriculum improvement in four sections, each accompanied by a list of related references. The first section explores the organizational and substantive planning needed to structure any curriculum improvement project effectively and includes information on organizing groups, establishing an improvement cycle, determining the purpose of the curriculum and nature of the goals to be included, and deciding the portion of the teacher's overall curriculum to be represented. Second, the development phase is discussed in terms of curriculum preparation, textbook selection, and the development of assessment and information management procedures that support the curriculum. Third, plans and procedures teachers develop to set curriculum in motion in the classroom are discussed along with staff development, staff support, and the clarification of roles, tasks, and timelines. Last, the implementation-oriented and outcome-oriented evaluation of improvement efforts is described. A workshop supplement and a form showing the instructional attention to be given essential learning skills in different subject areas are appended. (CLA)

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CURRICULUM LEADERS HANDBOOK

ED 320 007

Developed by

Glen Fielding

A Product of the

Lane County Intermediate Service District

Curriculum Services

November 1989

EA 022740

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CURRICULUM LEADER'S HANDBOOK

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A Product of the Linn-Benton Education Service District
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Before coming to the ESD, Glen was on the faculty of the Teaching Research Division at Western Oregon State College, where he directed and codirected research and development projects and also worked with the Valley Education Consortium.

Glen has taught at the high school, undergraduate, and graduate school levels. He holds a B.A. from Clark University, an M.A.T. from Brown University, and a Ph.D. from the University of Oregon.

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PREFACE

With the rapid changes in our society and the ever-changing educational needs and interest that result, plus the increased emphasis being placed by the state on curriculum revisions, more and more teachers and administrators are being asked to accept responsibilities for curriculum leadership.

The need has never been greater for the development of relevant and usable curriculum plans and materials. Linn-Benton ESD is pleased to offer the Curriculum Leader's Handbook in support of that very important effort.

Gerald J. Bennett
Superintendent
Linn-Benton Education Service District

FOREWORD

This is a book I wish I had written--for several reasons. First, it represents an outstanding synthesis of theory, research, and practice. Glen Fielding has a comprehensive knowledge of the best current theory and research in curriculum development; thus, the work is sound conceptually and empirically. However, unlike most leaders in the field, he has systematically worked with teachers in developing exemplary curricula--and the book reflects that hard-won wisdom.

Second, the book provides clear guidance without being unduly prescriptive. It suggests clear-cut procedures that have been found to be effective--but in each case presents some options that give districts a choice about processes and structures. Glen is straightforward in expressing his own preferences (preferences that I generally support)--but he makes it clear that they are only his recommendations, not the final word.

Finally, it is written in a clear and effective style. Unnecessary jargon has been eliminated; complex concepts have been clarified. And the style is clear and direct without being patronizing.

I am convinced that the educational leaders of Oregon who use this work will find it an invaluable guide in developing more effective and challenging curricula.

Allan A. Glatthorn
East Carolina University

INTRODUCTION

Why a Curriculum Leader's Handbook?

Oregon educators are working longer and harder now on curriculum improvement than at any other time in recent history. Spurred by national reports, state mandates, and their own commitments and concerns, teachers and administrators increasingly are asking tough questions about what students ought to be learning and how desired learning can best be fostered. Curriculum review and improvement have become a way of life in many Oregon school districts.

Unfortunately, while educators' commitment to curriculum improvement has increased, the published literature available to assist curriculum leaders has remained limited. Texts and journal articles on curriculum generally are too theoretical or too narrow in scope to provide the practical, broad-based help that administrators and teachers are seeking.

This handbook aims to fill this gap in the literature on curriculum improvement. It is written for administrators and teachers who have responsibility for making their district's curriculum better. Although it draws upon ideas contained in current texts and journal articles, it places major emphasis on insights from practical experience and procedures that have proven effective in the field. In addition, the handbook presents a range of options for carrying out particular curriculum tasks in order to accommodate the needs of districts of different size and with different priorities or operating styles.

Content and Organization

The handbook is divided into four chapters. Chapter 1, "Planning," focuses on basic organizational and substantive decisions that need to be made in order to structure a curriculum improvement project. Although planning is an ongoing aspect of improvement, this initial chapter concentrates on those aspects of planning that are most necessary to get a project off to a good start.

Chapter 2, "Development," deals with the actual building of a district's

curriculum and with the selection of textbooks and the selection or development of curriculum-related resources for assessment.

Chapter 3, "Implementation," focuses on putting into practice the products and procedures created or adapted during the development phase. Long and short range instructional planning, student assessment, and recording and reporting assessment information are addressed in this chapter. Staff development and implementation roles and responsibilities are also discussed here.

Chapter 4, "Evaluation," deals with both implementation-oriented evaluation, which asks about progress made and issues encountered in the implementation process, and outcome-oriented evaluation, which asks about the impact of an improvement effort on student learning.

At the end of each chapter is a brief list of books and articles that you may wish to consult as a supplement to the information provided in the chapter.

The focus of the handbook is on making improvements in particular subject areas, such as language arts, mathematics, science, social studies, health, or art. The Linn-Benton ESD chose to focus on improving specific fields of study because curriculum development teams generally are most concerned with this level of improvement. Recognizing, however, that there are important skills that cut across individual subject areas, as the state's "Essential Learning Skills" document suggests, the handbook deals with the issue of integrating cross-disciplinary skills in specific subject area curriculums (see Chapter 1). The handbook does not, however, deal with the creation of interdisciplinary programs or courses.

Finally, a supplement to the handbook is included in the Appendix that highlights key strategy options for curriculum improvement that have been discussed in more depth in the main body of the handbook. Developed for use in a workshop on curriculum improvement, the supplement might also serve as a "quick and easy" introduction to major ideas addressed in the handbook.

Intended Audiences

The handbook is for any educator or group of educators with responsibility for curriculum improvement. District administrators, building administrators, or teacher members of curriculum development teams or textbook adoption committees might find the handbook helpful.

Definition of "Curriculum"

Since the handbook centers on curriculum improvement, it seems essential to discuss what is meant by the term "curriculum." Here is a broad definition of this term:

> Curriculum consists of what states, school districts, schools, and teachers expect students to learn, the plans developed to foster learning, and how those expectations and plans are actualized in the classroom and other learning environments managed by the school.

This definition focuses on learning expectations, plans, and experiences and the relationship among them. The handbook deals with curriculum in this broad sense.

For practical reasons, however, the general term curriculum occasionally is used in the handbook to refer to one specific aspect of curriculum: the school district's written expectations for student learning. As the definition above indicates, curriculum is much more than the district's written curriculum, but for ease of communication, from time to time the term is used more narrowly. Thus, when the handbook talks about curriculum development it is referring to the process of constructing the district's written curriculum. When the handbook talks about curriculum implementation, it is talking about the process of putting into practice the district's written curriculum.

Acknowledgments

I am indebted to many curriculum leaders for advice and assistance in preparing this handbook. First of all, I want to thank Wes Vollmer and Dave Curry at the Linn-Benton ESD, who not only conceived of the idea for

this handbook, but provided guidance and support at every turn in its development. Wes and Dave's sensitive insights about curriculum improvement are reflected throughout the handbook. I am grateful to them for creating the project and for helping me to carry it out. I appreciate the fine work done by Mrs. Chrys Hulshof in providing general editorial assistance in producing this book.

I also want to thank Dave Curry for the interviews he conducted early in the project with Barbara Wolfe at the Oregon Department of Education and Judie Rhodes at the Lane ESD (Judie is now with the Astoria School District). Findings from these early interviews helped to confirm the need for the handbook and to shape its initial structure.

Dave also arranged and accompanied me on interviews with curriculum leaders in Linn and Benton counties during the 1988-89 school year. These interviews proved invaluable in thinking through the various strategy options developed in the handbook. I wish to thank each of the Linn and Benton county educators who shared their time and wisdom: Walt Blomberg, Pat Cariati, Prudy Draeger, Rod Harvey, Duane Hedy, Marshall Herron, Mary Johnson, Judy Koerner, Dick Moon, Marcia Swanson, Joe Weiss, Dave Willard, and Shirley Woods.

I also want to thank Allan Glatthorn of East Carolina University for his encouragement in undertaking the project, his constructive critiques of various drafts of the handbook, and for the generous foreword he wrote. Allan's remarkable gift for combining curriculum scholarship with practical experience has long been an inspiration to me.

Thanks also go to Roberta Hutton, Assistant Superintendent at the Oregon Department of Education, who carefully reviewed the handbook and offered warm and enthusiastic support. Roberta also made many thoughtful suggestions about how and where the handbook might be used.

Finally, I would like to thank my colleagues in the Valley Education Consortium (VEC), with whom I have had the privilege of working over the past decade. Many of the ideas and examples in this handbook come from my experience with the Consortium; I feel a special debt of gratitude to VEC and to the people that make it work.

Glen Fielding, November 1990

1. PLANNING

This chapter is intended to help you plan for long range curriculum improvement. The first part deals with organizational issues. It provides suggestions for:

- •organizing groups (councils, task forces, etc.) to guide improvement,
- •establishing an improvement "cycle,"
- •deciding whether to use the same or different improvement plans for different subjects, and
- •deciding whether to use a within-district or a consortium approach to improvement.

The second part deals with more substantive issues. It is organized around these questions:

- •What purposes will the district's written curriculum serve?
- •Will the written curriculum include only "mastery" goals or both mastery and "organic" goals?
- •What portion of a teacher's overall curriculum will the district's curriculum represent?
- •What common skills need to be integrated across different curriculum areas?
- •How will the written curriculum deal with student diversity?
- •What components will the district's written curriculum include?

Note that these substantive questions focus largely on the district's written curriculum. Planning that deals with other aspects of curriculum improvement, such as implementation and evaluation, also must be carried out. However, since the first order of business in curriculum improvement is to ensure that the district's written curriculum is as good as it can be, this first chapter concentrates on the written curriculum. Planning for subsequent aspects of curriculum improvement will be addressed later.

Part One: Organizational Planning

Organizing Groups to Guide Improvement

If you are in a district that already has a well-established organizational structure for making curriculum decisions, then you will want to skip this section. If, however, one of your tasks is to develop effective organizational structures, you may wish to consider the scheme shown in Display 1-1 on the next page. This scheme originally was proposed by Allan Glatthorn on the basis of his curriculum work with dozens of districts across the country. It is straightforward and seems to have worked well in districts that have used it. If your district is very small, you may want to form fewer groups than the four shown in the display. But the general responsibilities associated with each of the groups listed need to be carried out in one way or another.

Establishing an Improvement Cycle

Once a planning and decision-making structure is established, you and your colleagues probably will want to think about a long range plan or "cycle" for curriculum improvement. The need for a long range plan is especially important in view of the state's requirement that districts review and improve their curriculum in a particular subject area every six years in preparation for textbook adoption . This improvement process includes incorporating state-published "Essential Learning Skills" and "Common Curriculum Goals" into your district's curriculum guides.

For the sake of simplicity, I've divided a typical improvement "cycle" into the four common phases of "Planning, " "Development," "Implementation," and "Evaluation." Planning involves organizing for improvement and making decisions about how to go about it. Planning obviously occurs throughout all phases of curriculum improvement, but it is especially critical in the beginning of a project when a broad foundation for the project needs to be established. Development involves the actual preparation or adaptation of a curriculum as well as the selection of instructional resources and assessment procedures to support the curriculum. Implementation involves putting the new or revised curriculum and supporting instructional and assessment resources into practice; staff development and support are key aspects of this phase. Evaluation concerns, at a formative level, monitoring implementation and adjusting materials and procedures as needed. At a more summative

DISPLAY 1-1

A COMMON SCHEME FOR ORGANIZING CURRICULUM COMMITTEES AND WORK GROUPS*

1. The **school board**, working through a curriculum committee, makes major curriculum policy and budgetary decisions.

2. A **lay advisory council**, composed of citizens representing major influence groups, appointed by the board, makes recommendations to the board about curriculum matters. The superintendent generally is a member of this group.

3. A curriculum **leadership council**, composed of representatives from the teaching staff, building administrators, and district administrators, does all the major curriculum planning. It is a standing group, reporting to the superintendent.

4. Curriculum **task forces**, composed of teachers, a district staff member and one or two building administrators (depending on district size), do the actual curriculum development work. Task forces may designate one or two members with special writing skills as primary curriculum writers. Appointed for specific projects, task forces report to the leadership council.

*This scheme was originally described by Allan Glatthorn (Personal Communication, 1989).

level, evaluation involves determining the impact of your improved program, especially its impact on student learning, and reporting and acting upon evaluation findings.

Although it is assumed that curriculum review and improvement in each subject will deal with all four phases (planning, development, implementation, and evaluation), it also is assumed that you will need to make fundamental decisions within each of these phases to determine how specifically to proceed.

Deciding Whether to Use the Same or a Different Improvement Plan in Different Subjects

Many of the larger districts in Oregon have established systematic plans for curriculum improvement that apply equally well to all subjects. These districts have the resources to put a great deal of time and energy into improving each and every subject area. For example, in one large district in western Oregon, in each subject, including business education, driver education, home economics, and music, a year is spent doing research into new trends and analyzing exemplary programs, another year is spent on "needs assessment," another year is devoted to curriculum revision, yet an additional year is spent in textbook adoption, and so forth.

Most districts, however, simply cannot spend an equal amount of time and energy in each subject area. They have to make priorities among subjects, singling out some for major overhaul and others for small revisions. For example, an educator in one district mentioned to me recently that his district has made WRITING a major priority for several years; district staff have been intensely involved in creating a new curriculum guide in writing, identifying new instructional resources and activities, participating in "writing as a process" workshops, and trying out new procedures for obtaining and scoring student writing samples at the district-level. Having worked so hard in the area of writing, this district was not about to launch a similarly intensive effort in health, even though it was a textbook adoption year in health.

In another district, a staff member indicated that the district would be making comprehensive changes in health, math, and science, but there was no way that they were going to go through equally comprehensive changes in social studies, music, or art. Spending a year doing research on new trends in each of these areas, a year in doing needs assessments, a year in making revisions in curriculum guides, a year in textbook adoption, and so

forth simply would over-tax the resources of this district.

The point of these examples is that few districts can apply the four common stages of the improvement cycle (planning, development, implementation, and evaluation) with the same care and intensity in all subject areas. To do so would lead to "innovation overload." Also, in some cases, a district probably would find that, even if it had the time, resources, and inclination to make intensive change in a particular subject area, such changes are not needed. For example, one of my colleagues told me that his district is very happy with its current music program. Why should this district initiate a long term, large scale improvement effort in music when the music program seems to be doing fine as it is? Perhaps all that is needed is a bit of fine-tuning.

I suggest, therefore, that you and your colleagues make clear as part of your overall planning whether you intend to set improvement **priorities** among subject areas, or, as in some of the larger districts, you wish to give the same time and resources to every subject's improvement effort.

Deciding Whether to Use A Within-District or a Consortium Approach to Improvement

A group of small districts within Linn and Benton counties recently have pooled their resources to develop on a collective basis a new health curriculum guide. Administrator and teacher representatives from these districts met together in 1988 and decided that it made better sense to work together on a new guide than for each district to produce a guide independently. The rationale underlying this decision concerned both quality and cost-effectiveness. From the point of view of quality, representatives from these groups reasoned that a collaborative, cross-district approach would produce a greater range of good ideas for the curriculum than a purely local "homegrown" effort. From the point of view of cost-efficiency, districts reasoned that a consortium approach, in which each district appointed a small number of representatives to work on the collective task, would actually require fewer teacher released time days than if the district were to establish its own task force to create a new guide. In addition, the Linn-Benton ESD was in a position to provide technical and administrative support for the consortium project--support which it would not have been able to extend to each member district on an individual basis.

This example of a consortium project in health illustrates the potential

of a consortium to carry out significant curriculum development work. Certainly, a consortium cannot and should not substitute for local curriculum leadership, especially regarding decisions about how and when to implement a consortium-developed program. Yet for small schools, which typically lack central office curriculum coordinators and have only a small number of staff members available for curriculum development, consortium-based approaches can be very effective. The Valley Education Consortium (VEC), an organization in western Oregon of about a dozen school districts, two education service districts, and an institution of higher education, has been using a consortium approach to curriculum development for over a decade and has found it to be very beneficial to member districts.

Part Two: Substantive Planning

Once your district is organized for curriculum work and has made some basic decisions about the processes to be used to accomplish this work, key questions about the focus of curriculum development typically arise.

What Purposes will the District's Curriculum Serve?

The curriculum leadership council needs to clarify the purposes the district's written curriculum is to serve. Common purposes include:

- To help communicate to all members of the educational community, including parents, teachers, administrators, students, and the public at large, what the school district expects students to learn through its programs of instruction

- To guide instructional planning

- To guide the selection of textbooks and other instructional resources

- To guide student and program assessment

Setting forth the purposes of the written curriculum helps provide direction for the curriculum task forces that must actually develop the curriculum. It also serves to confirm for task force members that the written curriculum will not be the end of the curriculum improvement project, but rather a foundation to support changes in instruction, assessment, and student learning.

Will the Written Curriculum Include Only Mastery Goals or Both Mastery and Organic Goals?

Allan Glatthorn has drawn a useful distinction between "mastery" goals and "organic" goals. Mastery goals meet two criteria: (1) they are essential for all students, and (2) they can be specifically taught and assessed. Mastery goals, in Glatthorn's framework, constitute the "hard core" of the curriculum. Here are some possible examples of "mastery" learning goals:

- To distinguish facts from opinions
- To write clear and coherent paragraphs
- To explain how genetic information is passed from generation to to generation

The "organic" curriculum, according to Glatthorn, also deals with essential learnings, but in contrast to the mastery curriculum organic goals cannot be taught and assessed in a direct, specific way. Rather, organic goals are "nurtured" through the overall classroom and school environment. Generally, organic learnings pertain to attitudes, beliefs, values, and feelings (e.g., students' self-confidence, their commitment to learning, their sense of social responsibility). The organic curriculum might therefore be viewed as the "soft core" of the curriculum.

From Glatthorn's point of view, organic goals, though essential, should not be included in the district's written curriculum because they cannot effectively serve as a guide to instruction or assessment. Organic goals grow out of the total life of a school; they are not amenable to explicit definition, teaching, and measurement. Therefore, Glatthorn asks, why clutter the district's written curriculum with organic goals?

Most teachers and administrators I know find Glatthorn's argument very reasonable. However, I also have found that teachers, especially in language arts, social studies, and health, often make the case that a written curriculum ought to include at least a few key "organic" goals in order to show clearly the district's commitment to these goals and the responsibility of teachers to "nurture" (if not directly teach) them. For example, my colleagues and I recently completed a social studies curriculum, which included goals such as the following:

- Show respect for the natural environment (e.g., pick up litter, care for school property)
- Show tolerance for opinions with which one disagrees.
- Demonstrate a healthy skepticism toward unsubstantiated claims or opinions.

Although goals such as the above clearly are hard to teach toward in any direct sense and certainly are not "testable," we felt that they conveyed an important message about the goals of the social studies curriculum--a message that we wanted to build right into the written curriculum.

The point to be made, however, is that the curriculum leadership council ought to discuss whether both organic and mastery goals or only mastery goals are to be included in the written curriculum. I believe arguments can be made for either excluding or including organic goals. The leadership council might want to discuss this issue with members of curriculum development task forces in specific subject areas. Whatever discussion or decision-making process is used, a decision must be made in the early stages of curriculum development, since it has significant implications for curriculum design.

What Portion of a Teacher's Curriculum Should the District's Written Curriculum Represent?

Teachers sometimes complain that district curriculum guides contain so many prescribed learning goals and objectives that there is no room for teachers to think of their own goals for student learning. Meeting district-established goals, teachers may find, is a full time job.

One way the curriculum leadership council might address teachers' concern about the large amount of time required for the district's curriculum is to establish general limits on the proportion of instructional time needed for the district's written curriculum. For example, as a general rule of thumb, the council might suggest that the district's written curriculum should be constructed so that the typical class of students (if there is such a thing as "typical"), under good instructional conditions, should be able to master the curriculum in no more than about 3/4 of allocated class and study time. (Such rules of thumb would apply to "mastery" goals as distinct from "organic" goals.) This would allow teachers to determine on an individual or grade-level team basis how best to use the remaining 1/4 of instructional time.

Of course, it's difficult to estimate how much time it will take students to achieve a particular set of learning goals, especially when students learn at such different rates. But if the leadership council is serious about developing a curriculum that does not absorb 100 percent of teachers' instructional time, then setting boundaries on the amount of time the district's curriculum is supposed to require is an idea worth considering.

What Common Skills Need to Be Integrated Across Different Subject Areas?

The focus of this handbook is on improving curriculums in specific subject areas. However, it's clear that there are essential learning and thinking skills that apply across different subject areas. The movement referred to as "reading and writing across the curriculum" symbolizes this theme. The emphasis over the past few years on "thinking" throughout the curriculum also reflects this theme, as does the focus on applying "study skills" in different subject areas.

As an illustration of common skills that subject area task forces might be asked to integrate in their curriculums, I have included in Display 1-2 a set of general "reasoning" skills. This set is adapted from a reasoning skills framework that my colleagues and I developed several years ago. We articulated a set of reasoning skills in response to the requirement established by the the Oregon State Board of Education that all students must demonstrate competence in REASONING as a condition of graduation from high school. Since we believed that "reasoning" encompassed skills that all subject areas addressed, we wanted to begin our response to this requirement by first defining what general skills seemed to be associated with the concept of "reasoning." We then asked various subject area task forces to examine our general set of reasoning skills and to decide what level of instructional attention particular skills should receive in specific curriculum areas. (A practical format for showing levels of instructional attention is also included in Display 1-2.) Then, when the subject area task forces began actually writing learning goals, they had a good idea of the reasoning skills they needed to address in their curriculums and how much emphasis to place on these skills.

The Oregon Department of Education currently requires that districts integrate into their curricula the "Essential Learning Skills" that the Department has published. Therefore, in addition to the reasoning skills summary on the next page, I have included in Appendix A of this handbook a form that some districts have found helpful in meeting the state's current requirement. The form summarizes the State Department's list of essential skills, using the same headings and numbering system as in the State's document, and provides space for a subject area task force to identify the level of instructional attention each essential skill is to receive in its curriculum.

DISPLAY 1-2

A FORM FOR SHOWING THE INSTRUCTIONAL ATTENTION "REASONING" SKILLS ARE TO RECEIVE IN VARIOUS SUBJECT AREA CURRICULUMS

Level of Instructional Attention a Skill is to Receive in a Subject Area Curriculum:

XX = This curriculum is primarily responsible for developing this skill.
X = This curriculum contributes to the development of this skill.
0 = This curriculum makes little or no contribution to the development of this skill.

GENERAL REASONING SKILLS	Lan. Arts	Math	Science	Soc. St.	Health
A. Recognizing Patterns and Relationships					
1. Group and categorize objects, events, and ideas.	___	___	___	___	___
2. Recognize sequences and patterns in events and in numbers.	___	___	___	___	___
3. Compare and contrast objects, events, and ideas.	___	___	___	___	___
4. Recognize cause-effect, part-whole, and other common logical relationships.	___	___	___	___	___
5. Draw analogies between similar situations and ideas.	___	___	___	___	___
B. Interpreting, Analyzing, and Predicting					
1. Draw logical inferences from information presented or from events observed.	___	___	___	___	___
2. Interpret the main idea or theme of an oral, written, or visual communication.	___	___	___	___	___
3. Develop thoughtful explanations and analyses of issues, problems, events.	___	___	___	___	___
4. Formulate hypotheses, generalizations, and predictions, and devise ways to "test" them.	___	___	___	___	___
C. Making Judgments and Evaluations					
1. Distinguish between sense and nonsense.	___	___	___	___	___
2. Distinguish between facts and opinions.	___	___	___	___	___
3. Detect assumptions underlying statements.	___	___	___	___	___
4. Identify different types of evidence that can be used to support a conclusion or opinion (e.g, facts, examples, statistics, judgments of experts).	___	___	___	___	___
5. Assess the quality (relevance, trustworthiness, sufficiency) of evidence used to support a conclusion or opinion.	___	___	___	___	___

(Continued on the next page)

DISPLAY 1-2 (continued)

	Lan. Arts	Math	Science	Soc.St.	Health
6. Recognize inconsistency, "circularity," and other common fallacies in reasoning.	___	___	___	___	___
7. Use strong evidence and logical reasoning when developing an opinion or conclusion.	___	___	___	___	___
8. Recognize bias (own and others).	___	___	___	___	___
9. Recognize and guard against propaganda.	___	___	___	___	___
D. Solving Problems and Making Decisions					
1. Clarify the problem to be solved or the issue to be decided (e.g., identify the central question that needs to be answered before a solution can be found).	___	___	___	___	___
2. Determine criteria that the decision or solution should meet (e.g., the decision ought to be fair to all group members).	___	___	___	___	___
3. Develop plans for solving the problem or reaching the decision.	___	___	___	___	___
4. Implement the plan, monitoring progress and making adjustments as needed.	___	___	___	___	___
5. Evaluate the effectiveness of the solution or the wisdom of the decision, and make revisions as warranted.	___	___	___	___	___

How will the Written Curriculum Deal with Student Diversity?

Is the district's written curriculum in a subject area to apply to ALL students? Or is a separate or "adapted" curriculum going to be written for special groups of students, such as limited English speaking students, students with special learning difficulties, or those judged to be talented and gifted? The focus in Oregon is on developing a "core of common learning" that applies to all students, even though it is clearly recognized that some students will need more time and more intensive instructional and social support to progress through the curriculum than others. If your district is gearing its curriculum development work to all students, this assumption needs to be communicated to the development task forces. If not, your alternative position needs to made clear.

What Grade Levels and Courses are to be Included in the Improvement Effort?

The Curriculum Leadership Council needs to make clear whether the curriculum to be developed in a particular subject area is to focus on learning from kindergarten through high school, or just one or two levels of schooling, e.g., the elementary and middle school. The Council also needs to clarify whether all courses or just required courses are to be addressed.

What Components Should the District's Written Curriculum Include?

A district's written curriculum in a particular subject area probably needs to include the following five elements, each of which will be discussed and illustrated in the next chapter:

1. A "philosophy" statement indicating the assumptions that guided the development of the curriculum (e.g., assumptions about the importance of "whole language" in language arts, or the connections between science, technology, and society in a science program).

2. Goals for the curriculum or "program" as a whole. These are broad goals that give underlying direction to more specific grade-level and course goals. For example, here is a possible goal for a K-12 program in social studies: "Students will develop sensitivity toward and respect for the many differences that exist among individuals and peoples, and at the same time come to understand

and appreciate the characteristics that all humans share." Establishing program goals is a state requirement.

3. A scope and sequence summary showing in a general form what content and skills are to be developed across different grade levels and courses. (Considerable detail about developing scope and sequence summaries is provided in the next chapter.)

4. A written set of grade level or course goals indicating what students are to accomplish in the subject areas by the end of each grade level and course. For example, a grade four goal for social studies might be: "Discuss how the natural environment in different geographic area of the state influences how people live and work." Establishing grade level and course goals is a state requirement.

5. Documentation showing that the district's curriculum reflects the learning expectations contained in the State Department's "Essential Learning Skills" and "Common Curriculum Goals."

Many districts choose to include additional components in their curriculum materials. For example, some districts ask task forces to develop illustrative learning activities or assessment exercises alongside grade level or course goals to show more concretely what these goals mean and how they might be taught or assessed. Other districts ask task forces to identify textbook chapters or page numbers or supplementary instructional resources that might be used to teach particular goals. Yet other districts might sponsor the development of actual units of instruction, including daily plans, or "instructional resource kits," containing "hands on" instructional materials related to various grade level or course goals.

My own experience is that a curriculum leadership council should make clear its expectations about the first five components listed above. The council then can ask subject area task forces to make recommendations about adding additional components to the written curriculum once progress toward the first five components has been made. Additional components may or may not be considered necessary, or they may be considered necessary for certain new or complex areas within a curriculum, but not for all areas.

Additional Resources

Connelly, E.M. & Clandinin, D. J. (1988). Teachers as curriculum planners: Narratives of experience. N.Y.: Teachers College Press.

Doll, R. C. (1989). Curriculum improvement: Decision making and process, 7th ed. Boston: Allyn and Bacon.

English, F. W. (1986-1987). It's time to abolish conventional curriculum guides. Educational Leadership, 44, 50-52.

Fielding, G.D. (1989). Improving school curriculum and assessment through a school-university partnership. NASSP Bulletin, 73 (513), 63-74.

Glatthorn, A. A. (1987). Curriculum leadership. Glenview, Ill.: Scott Foresman.

Glatthorn, A. A. (1987). Curriculum renewal. Alexandria, VA: Association for Supervision and Curriculum Development.

Kliebard, H. M. (1989). Problems of definition in curriculum. Journal of Curriculum and Supervision, 5 (1), 1-5.

Martin, D.S, Saif, P., Thiel, L. (1986-1987). Curriculum development: Who is involved and how. Educational Leadership, 44, 40-48.

Martin, D. S, Glatthorn, A., Winters, M. & Saif, P. (1989). Curriculum leadership: Case studies for program practitioners. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J., Brandt, R. S., Hughes, C. S., Jones, B. F., Presseisen, B. Z., Rankin, S. C., & Suhor, C. (1988). Dimensions of thinking: A framework for curriculum and instruction. Alexandria, VA: Association for Supervision and Curriculum Development.

Pajak, E. (1989). The central office supervisor of curriculum and instruction. Boston: Allyn and Bacon.

2. DEVELOPMENT

Once the organizational and substantive decisions discussed in Chapter 1 are made, a task force in a specific subject area can begin the development phase of curriculum improvement. Included in this phase are the preparation of the district's written curriculum, the selection of textbooks, and the development of assessment and information management procedures that support the curriculum. Each of these three targets of development -- the written curriculum, textbooks, and assessment -- is addressed in a separate section in this chapter.

The Written Curriculum

The written curriculum is the cornerstone of a curriculum improvement effort. This section presents guidelines for developing or adapting the written curriculum.

Deciding Whether Big Changes or Small Revisions are Needed

I mentioned in Chapter One that most districts will decide how much time, effort, and support to give a curriculum improvement project based in large part on how big a change is needed in the curriculum. The bigger the change anticipated, the more intensive and sustained the improvement project will be.

Generally, I find that a task force can determine how big or small a change is needed in a curriculum in a couple of day-long meetings (as long as task force members are willing to do a bit of reading and thinking as "homework"). To help make this determination, task force members should (a) become familiar with the major points of emphasis of state-mandated curriculum goals and the concept papers that support them, (b) review and discuss several additional, national curriculum reports, and (c) express and discuss their own sense of what's most important to include and emphasize in the curriculum. Once the task force has had a chance to discuss state requirements, national trends, and their own ideas, they can, relatively quickly and easily, compare state-mandated and desired curriculum content with the district's existing curriculum guide (or, if one doesn't exist, the scope and sequence as represented by the textbooks in use). If the existing curriculum is closely aligned with the mandated and desired content the task force has identified, the development work ahead

will be of limited scope. If the existing curriculum clearly falls short of state requirements and/or the other sources of guidance the task force has embraced, then the changes ahead will be more extensive.

Display 2-1 summarizes a practical set of steps a task force might take to help determine the kind and extent of change that a curriculum might need. Display 2-2 presents an illustration of a set of conclusions that a task force might reach about the change needed in a district's science curriculum.

Deciding Whether to do Your Own Development Work or to Adopt or Adapt a Guide Produced Elsewhere

If you plan on making big changes in your existing curriculum, you will need to determine whether you should develop an improved curriculum guide internally (or through a consortium of schools with similar needs), or whether it would be better to adopt or adapt a guide developed by the State Department (the Comprehensive Curriculum Goals), by another district, or by a consortium of districts, such as the Tri County Goal Development Consortium or the Valley Education Consortium.

The obvious advantage to selecting a curriculum produced elsewhere, even if your district needs to make some adjustments in it, is that this saves you much time and effort. After all, nobody wants to reinvent the wheel. Moreover, since all districts must show that their curriculum reflects the learning expectations conveyed by the state's common curriculum goals and essential learning skills (the essential learning skills are built into each of the common curriculum goal documents), many districts have found it most efficient simply to adopt the state's curriculum guides. If your district decides to do this, then most of what is contained in the rest of this chapter will be irrelevant to you.

In my experience, however, externally produced curriculums often have their own problems. They may be organized in a way that is unclear or cumbersome to district staff, or they may use language patterns that strike district staff as awkward, confusing, or overly abstract. In addition, an externally produced curriculum often contains only some of the learning strands desired by a task force. In other words, it's often difficult to find just what one is looking for.

DISPLAY 2-1

STEPS IN DETERMINING THE KIND AND EXTENT OF CHANGES NEEDED IN A CURRICULUM

1. SUMMARIZE CURRENT STATE CURRICULUM REQUIREMENTS

The task force briefly summarizes current curriculum requirements set by the State Department of Education, as conveyed by the Common Curriculum Goals and the concept papers that support them. This summary need not specify individual learning goals; it need only indicate the major areas of content or skill that are mandated, with an emphasis on any areas that the task force perceives as potentially different from what currently is taught or emphasized in the district. For example, in math, new areas, at least at the elementary level, would include geometry and "visualization" skills and probability and statistics. In language arts, areas such as "writing as a process," literature from minority cultures, and the nature and variety of dialects might be identified as currently lacking in emphasis in a particular district.

2. REVIEW OTHER, NATIONAL CURRICULUM TRENDS

Task force members read and discuss several additional papers and reports, other than those provided by the state department, to extend their understanding of national trends in the field. For example, the task force might read a pertinent chapter in ASCD's 1988 Yearbook on the Content of the Curriculum, or a bulletin from a national subject area professional organization, such as the National Science Teachers' Association or the National Council of Teachers of English. (Task force members might divide into pairs, with each pair taking responsibility for reading one major paper or report and summarizing it for the task force as a whole.) The task force then summarizes briefly in writing those national recommendations that they consider most thoughtful and important.

3. REFLECT ON OWN PROFESSIONAL EXPERIENCE

Task force members add to summaries of state-requirements and national recommendations any other suggestions that they would like to make on the basis of their own professional experience and judgment.

4. MAKE A JUDGMENT ABOUT MAGNITUDE OF CHANGE NEEDED

After discussing the state-mandated curriculum content, national recommendations, and their own proposals about the curriculum, task force members review the district's existing written curriculum. They then make a judgment about the degree to which the state requirements and the other recommendations they have judged to be important call for BIG CHANGES or SMALL REVISIONS in the existing curriculum. The task force then summarizes the kind of changes or revisions it anticipates will be needed and reports this summary to the leadership council (see Display 2-2 for an illustration).

DISPLAY 2-2

A TASK FORCE'S INITIAL RECOMMENDATIONS ABOUT CHANGES NEEDED IN A SCIENCE CURRICULUM

This hypothetical task force in science compared its district's current science curriculum guide with the new state curriculum requirements in science, various national recommendations in science education, and professional judgments of task force members themselves. On the basis of this comparison, the task force proposed that the following BIG CHANGES be made in the district's science curriculum:

1. Focus more attention on the NATURE OF SCIENCE (e.g., understanding the difference between scientific and religious truth; understanding how scientific knowledge is developed and extended).

2. Focus more attention on FUNDAMENTAL CONCEPTS in science that have broad application (e.g., matter, energy, force, equilibrium, organism, cycle).

3. Focus more attention on FUNDAMENTAL PROCESSES in science (e.g., observing, measuring, classifying, formulating and testing hypotheses).

4. Focus more attention on TECHNOLOGY, its relationship to science, and its impact on our lives and our society.

5. Focus more attention on SOCIAL ISSUES that relate closely to science and technology (e.g., toxic wastes, acid rain, genetic engineering, test tube babies, nuclear energy).

6. In view of points 1 to 5 above, focus LESS ATTENTION ON SPECIFIC FACTS, TERMS, AND PROCEDURES.

The state department, furthermore, encourages local districts to develop their own curriculum. To be sure, districts must integrate in their curriculum the state's expectations for student learning , but the state does not require that districts adopt the same structure or terminology used in the state materials.

The task force, therefore, should set aside some time to review curriculum documents that already have been developed and to determine whether any of them contain the qualities it is seeking (or whether a combination of various features of two or three documents might do the trick). If not, the task force will need to recommend to the leadership council that substantial released time and/or summer work be provided to build the new curriculum.

If your district (or your consortium of districts) does plan to construct its own curriculum, then the next part of this chapter might be helpful. Suggestions are made for developing each of the five components of the written curriculum identified at the end of Chapter One: Philosophy, Program Goals, Scope and Sequence Summary, Grade Level and Course Goals, and Documentation Showing Integration of State Goals. Suggestions for obtaining feedback from the staff as a whole on the curriculum being developed also are provided.

Developing a Philosophy

The task force probably will want to develop a brief philosophy statement indicating the major assumptions that will guide work on the curriculum. These assumptions generally will grow out of the initial discussions task force members had about state-requirements, national recommendations, and their own "vision" for a curriculum. Usually, philosophy statements give reasons as to why certain broad themes or skill areas are emphasized in the curriculum and why the curriculum is organized as it is. A relatively comprehensive philosophy statement would probably respond to each of the questions shown in Display 2-3.

I'd like to provide an illustration of a philosophy statement that responds to the first question in the display, which asks about changes a curriculum task force has made in the way a subject is usually treated and the reasons for these changes. In a recent social studies curriculum project, my colleagues and I decided to depart from the traditional "expanding horizons" curriculum in the elementary grades, which calls for students to study the family, the neighborhood, and then the local community at grades one to three. To provide a rationale for including a broader range of cultural, geographic, and historical content in the lower grades than traditionally has been offered, we stated:

Today's students, through their experience with television, videos, and the print media, and, in many cases, through their personal interaction with members of different cultural groups, are exposed to a wider range of social information than past generations. Young children, moreover, seem genuinely intrigued with distant times, places, and cultures. Accordingly, this curriculum provides for a broader and richer social studies curriculum for young students than traditionally has been presented.

As this example suggests, philosophy statements need not be long or laden with scholarly footnotes or references. They simply need to lay out the major assumptions or beliefs that guided the curriculum's development.

I would note, however, that it usually is difficult to prepare a complete philosophy for a curriculum at the front end of a curriculum development project because at this point the task force is still figuring out just what will be emphasized in the curriculum and how it will be organized. In my experience, in the beginning stages, it's both possible and desirable

DISPLAY 2-3

COMMON ISSUES IN THE DEVELOPMENT OF A PHILOSOPHY*

To help you develop a philosophy, answer the questions that seem most important to you.

1. What major changes have you made in the way this subject usually is treated, and why have you made those changes?

2. What assumptions do you hold about the interconnectedness of areas within this subject and about the relationship of this subject to others?

3. What key beliefs do you hold about the nature of learning in this subject area?

4. What is the special contribution of this subject to the general education of the students?

5. In which specific ways is this curriculum responsive to changes in the society and in the composition of the student body?

6. In what specific ways does this curriculum attempt to balance process and content (or skill and knowledge), and why have you adopted this position?

*These issues were suggested by Allan Glatthorn, Personal Communication, 1989.

to sketch out a rough, tentative draft of a philosophy statement, but it doesn't make much sense to expect a definitive, refined statement. That can only come after the task force has gained more experience in actually developing the curriculum. In other words, I'm recommending that a basic outline or rough draft of a philosophy be prepared at the outset of the project as an initial guide to work, but that the task force remain open to revising, extending, or restructuring the initial philosophy as the project matures.

I would also note that philosophy statements generally are best drafted by one or two members of a task force with special writing skills. These individuals obviously must respond to the group's discussions and decisions and must submit their draft to the group's review. However, unless the actual writing task is assigned to one or two individuals, the task force as a whole, in my experience, will get bogged down in the task.

Developing Program Goals

As indicated in Chapter 1, program goals indicate on a general level what students are expected to gain from an instructional program as a whole. Program goals generally relate closely to philosophy statements in that both point to broad themes, skills, and sensitivities that the program embodies. Display 2-4 illustrates program goals in a variety of subject areas.

As with philosophy statements, program goals generally are best drafted by one or two talented writers on the task force and then reviewed and refined by the task force as a whole. Also, like philosophy statements, program goals generally can be "roughed out" in the beginning of a project, so long as task force members recognize that the goals will no doubt need to be refined as the project matures.

DISPLAY 2-4

EXAMPLES OF PROGRAM GOALS IN DIFFERENT SUBJECT AREAS*

Language Arts

•Students will be able to communicate effectively in a wide range of situations and for a variety of purposes.

•Students will be able to respond to literature personally, analytically, and creatively.

Social Studies

•Students will develop a historical perspective on the social world in which they live, gaining insight into the major forces, ideas, and individuals that have shaped contemporary life.

•Students will develop the skills and attitudes needed to acquire and evaluate new information about social issues, public affairs, and world events.

Mathematics

•Students will develop an understanding of mathematics as a language, and of the many forms and applications that this language takes.

•Students will develop a wide repertoire of skills for analyzing and solving problems, and for checking the appropriateness and reasonableness of a solution to a problem.

Science

•Students will develop an understanding of the nature of science, and become familiar with the wide range of methods and procedures used by scientists.

•Students will be able to engage in "the process of science" under varying conditions of inquiry.

*The goals on this page were selected and adapted from more comprehensive goal sets developed by the Valley Education Consortium.

Developing a Scope and Sequence Summary

A scope and sequence summary is a relatively brief document or a large chart showing in a general form what is to be taught in a particular subject area at what grade levels. Scope and sequence summaries have two main purposes. One is to provide a framework to guide the development of grade level and course goals. The second is to communicate to various members of the educational community (teachers, curriculum coordinators, counselors, students and parents) the major focal points of instruction in a subject area at different grades.

I'd like to talk first about issues of scope and then issues of sequence.

Scope. The scope of the curriculum refers to the content, skills, and attitudes (if attitudes or other "organic" goals are to be included) that the curriculum in a particular subject area encompasses. After discussing the state's Common Curriculum Goals and Essential Learning Skills (and possibly other sets of cross-disciplinary skills, such as the set of "reasoning" skills shown in Display 1-2 in Chapter 1) , national reports, and their own professional experience and insights, task force members generally have a reasonably good idea about what the general scope of the curriculum should be.

In order to express the curriculum's scope in an easy-to-follow and useful form, it's necessary to divide the curriculum into individual "strands" of learning. These might be viewed as the major headings or organizers for the curriculum. For example, the state's curriculum in mathematics consists of nine strands:

- Number and Numeration
- Computational Skills
- Problem Solving
- Geometry and Visualization Skills
- Measurement
- Statistics and Probability
- Mathematical Relationships
- Oral and Written Communication Skills
- Study Skills

In some cases, strands are divided into more specific themes,

processes, or skill areas, which function as substrands or subheadings. For example, the Corvallis School District has organized its elementary language arts program around the two global strands of "expressive" and "receptive," each of which is supported by seven "process-oriented" substrands (e.g., within the expressive strand are the substrands of prewriting/speaking, planning, rough drafting, responding/reacting, revising, editing, sharing and presenting). As another example, some social studies curriculums, following recommendations from the National Geographic Society, have established five themes within the general strand of geography: location, place, human-environment interaction, mobility, and region.

Choice of strands and substrands can send important messages to teachers about what is new in a curriculum. For example, the state's math curriculum contains at least two strands (e.g.,"probability and statistics" and "geometry and visualization skills") that represent relatively new focal points for instruction, at least at the elementary level. As another example, the strands and substrands used in Corvallis' Elementary Language Arts Guide emphasize fundamental communication and thinking processes that often have been neglected in the past. If you want the curriculum to stand for something new, then that "newness" ought be reflected in one or more of the strands or substrands you select as the chief organizers for the curriculum.

Another point I would make about the selection of strands is that separate strands do not necessarily imply separate teaching. For example, most math curriculums, including the state's, contain a strand entitled "Problem Solving" to highlight the central role of problem solving in math and to identify some of the key strategies and heuristics associated with effective math problem solving. However, while students probably should receive some direct instruction in general problem solving strategies and heuristics, they must also receive instruction in applying general problem solving skills in specific content strands, such as measurement, geometry, and statistics and probability. Listing problem solving as a separate strand does not, in other words, mean that problem solving is intended to be taught in isolation from the specific content areas of math.

Sequence. In a scope and sequence summary, sequence is an indication of the grade levels at which strands, substrands, or major elements of content or skill within them, are to be taught. National curriculum reports and state concept papers often address sequencing issues alongside issues of scope because they can have a major impact on

curriculum design. For example, there is a national movement to develop "integrated" or "unitary" core mathematics and science programs at the secondary level in which courses at various grade levels include and show the connections among different branches of a discipline rather than focusing primarily on one branch only. In science, as an illustration, an integrated core course at grade 9 or 10 would not focus exclusively on earth science, or biology, or physical science, but would include key concepts from each of these branches of study. In other words, instead of designating a different and separate branch of science for study at each grade level, a more unified and broader-based science course would be offered at each grade. Not only would the overall scope or content of the science curriculum change in this framework, but the way in which content was sequenced from one grade to the next would change.

In the area of social studies, as mentioned earlier, several national reports have raised questions about the appropriateness of the traditional "expanding horizons" approach to sequencing social studies content in the primary grades (from a focus on family, to neighborhood, to community). The state of California, for example, has developed a History-Social Science Framework that departs from the expanding horizons model. In this framework, kindergarten children focus on "Learning and Working Now and Long Ago." First graders focus on "A Child's Place in Time and Space." Second graders study "People Who Make a Difference." And third graders concentrate on "Continuity and Change." The Valley Education Consortium also has developed an alternative sequence for elementary social studies.

Once a task force has had a chance to discuss national trends and state requirements regarding sequencing, it needs to make proposals about a general scope and sequence framework, which can in turn guide the development of more specific learning goals. For example, a task force in social studies would need to make basic decisions about whether to use the expanding horizons or an alternative scheme for sequencing primary level curriculum as a basis for writing specific grade level goals for this level.

In regard to the actual format of a scope and sequence summary, there seem to be two basic alternatives, which, for ease of communication, I refer to as the **BOX** option and the **SYMBOL** option.

The BOX option establishes a box or cell for each grade or cluster of grades (K-3, 4-5, 6-8, 9-12) within each major strand of the curriculum. It then lists the major outcomes to be emphasized in each of the grade level boxes. An example of this is shown in Display 2-5.

The BOX option is most appropriate when you want to highlight the outcomes that are distinctive to each grade or cluster of grades. The purpose of creating separate outcome boxes is to show the separate outcomes emphasized at each grade level. Each box constitutes a segment of the curriculum. Although there may be some overlapping from one segment to another, the primary function of the boxes is to illuminate what is distinctive in each segment.

The SYMBOLS option uses symbols of one type or another to show the level of instructional attention a particular strand, or a set of outcomes within strands, is to receive across different grades. This format is preferable to the Box Format whenever you wish to emphasize a common set of outcomes that spiral throughout the grade levels. An example of the symbol option is shown in Display 2-6. Note that the symbols P, I, D, M, and O are used to show the level of instructional attention each "goal area" within a mathematics curriculum is to receive from grades K through 10. The chart does NOT indicate the outcomes within a particular area, such as fractions and decimals, that are distinctive to a particular grade, but rather shows how the same common area is treated differently as you progress from one grade to the next.

You may use the Symbols Option without necessarily using such a detailed set of symbols as those shown in Display 2-6. For example, in Display 2-7 you will see that the single symbol X is used to show the grade levels at which an outcome within a strand is to be emphasized. In this example, the chart would have been too cluttered and too difficult to use had a detailed symbol system been applied. One reason for this is that the listing of outcomes down the left side of the chart is more detailed than in the mathematics example shown in Display 2-6. Generally, the more detailed your listing of outcomes down the left, the less detail you will want to use in the grade-level columns to the right.

DISPLAY 2-5

Health Curriculum
Linn-Benton Education Service District
Scope and Sequence - Grades K - 12

GRADE LEVELS	GOAL 1.0 SAFE LIVING	GOAL 2.0 STRESSOR/RISK MANAGEMENT	GOAL 3.0 PHYSICAL FITNESS	GOAL 4.0 NUTRITION
K - 3	• Skateboard • Pedestrian Safety • Vehicle Safety • Bicycle Safety • Fire Safety • Poison Safety • Water Safety • Substance Abuse • Child Abuse • First Aid • Stranger Awareness • Personal Hygiene/ Body Fluids	• Feelings • Stressor Indentification • Physical Effects • Emotional Effects • Stress Management Techniques • Effects on Others • Relationship to Wellness	• Wellness • Body Systems • Body Composition • Self-esteem • Self-worth • Fitness Tests • Growth and Development • Aerobic-Anaerobic Activities • Physical Activity	• Food Groups • Food Intake • Eating Habits • Food Characteristics • Nutritional Needs • Factors Influencing Food Choices • Food Preparation and Preservation • Dental Health • Safe and Unsafe Diets • Nutritional Info.
4 - 5	• Communicable Disease, including AIDS • Gun Safety • Substance Abuse • Hygiene • Peer Relationships • Child Abuse	• Stressor Analysis • Effects of Stressors • Stress Management Techniques • Stressor Classifications • Effects on Others • Assessment • Relationship to Wellness	• Emotional Benefits • Physical Benefits • Body Systems • Body Composition • Fitness Tests • Growth and Development • Aerobic-Anaerobic Activities • Physical Activity • Safe Practices in Fitness	• Personal Food Program • Eating Habits • Food Characteristics • Food Plan • Food Choices • Food Preparation and Storage
6 - 8	• Peer Relationships • Drunk Driving • Risk Taking • Teen Pregnancy • Substance Abuse • Emergency Care • Common Diseases • Sexual Behavior • AIDS/Child Care	• Predict Short and Long term effects • Analyze Stressors • Develop Plans • Effects on Others • Assessment • Relationship to Wellness	• Body Systems • Fitness and Substance Abuse • Stress Reduction • Body Composition • Health Careers • Fitness Tests • Fitness Activities • Safe Practices in Fitness	• USDA Dietary Guidelines • Menu Planning • Eating Habits • Food Nutrients • Food Choices • Food Preparation and Storage
9 - 12	• Diseases/ AIDS • First Aid/CPR • Health Issues • Wilderness Survival • Child Care • Safety Planning • Teen Pregnancy • Drunk Driving • Substance Abuse	• Stress/Risk Management Plan • Risk Management Skills • Predict Short and Long Range Effects • Careers • Relationship to Wellness	• Fitness Tests • Fitness Behaviors • Flexibility • Endurance • Physical Activities • Health Careers	• Food Plans • Eating Habits • Food Classification Systems • Food Choices • Food Preparation and Storage • Food Information

DISPLAY 2-6

ILLUSTRATIVE SCOPE AND SEQUENCE SUMMARY FOR A CORE PROGRAM IN MATHEMATICS, GRADES K-10*

Goal Area	K	1	2	3	4	5	6	7	8	9	10
Problem Solving	(P)	(I)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Numeration	(P)	(I)	(D)	D	D	D	M	M	M	M	M
Whole Numbers											
Addition	(P)	(I)	(D)	D	D	D	M	M	M	M	M
Subtraction	(P)	(I)	(D)	D	D	D	M	M	M	M	M
Multiplication		P	I	(D)	(D)	D	M	M	M	M	M
Division			P	I	D	(D)	(M)	M	M	M	M
Measurement	P	I	D	(D)	D	D	D	M	M	M	M
Statistics and Probability	P	I	D	D	D	D	(D)	(D)	(D)	(D)	(D)
Core Geometry	P	I	D	(D)	(D)	(D)	D	D	D	D	M
Fractions	P	I	D	D	D	D	(D)	(D)	D	M	M
Decimals			P	I	(D)	(D)	(D)	(D)	D	M	M
Ratio, Proportions, Percent							P	I	(D)	D	M
Core Algebra							P	I	(D)	(D)	(D)
Interdisciplinary and Career Applications								I	I	I	I
* Study Skills and use of information resources	D	D	D	D	D	D	D	D	D	D	D
* Attitudes and Related Feelings/ Commitments	D	D	D	D	D	D	D	D	D	D	D

P = Prepare; attend to as opportunities appear
I = Introduce
D = Develop and extend

(D) = A focal point for instruction (EMPHASIS) throughout the school year
*Treated as an integrated part of all curriculum areas within the CORE OF COMMON LEARNING

*Developed by the Valley Education Consortium

DISPLAY 2-7

SCOPE AND SEQUENCE SUMMARY FOR THE GOVERNMENT STRAND OF A GRADE K-6 SOCIAL STUDIES CURRICULUM

X = Emphasized

	Grade Levels						
	K	1	2	3	4	5	6
Strand: Government							
Organizing Themes:							
•Rules							
--classroom and playground rules	X	X					
--"rules" in society			X	X			
•Rights and Responsibilities							
--as a person and classroom member		X	X	X			
--as a citizen of a democracy					X	X	X
•Basic Concepts and Processes of Government							
--what a government is and does			X				
--elections, representatives				X			
--branches/levels of gov't.					X	X	
--some differences among governments around world							X
•Beginning Historical Perspective on U.S. Government and Politics							
--beginnings of our gov't. through civil war						X	
--post civil war through present							X
Skill Areas							
•Cooperating in Group Activities	X	X	X	X	X	X	X
•Resolving Group Conflicts					X	X	X
•Expressing/Supporting Opinions				X		X	X

Obtaining feedback from other staff members. When you have developed a tentative philosophy statement, a set of program goals, and a scope and sequence summary, you generally have enough accomplished to ask other teachers in the district to review and make suggestions about your proposals. I have found that if you ask teachers to react only to philosophy and program goals, they often are a little disappointed or even frustrated, because philosophy statements and program goals are typically rather general and abstract; they often seem to lack enough specificity for teachers to "sink their teeth into."

In my experience, the most effective way to obtain helpful feedback from the staff consists of (a) relatively brief presentations at faculty meetings carried out by teacher members of the curriculum development task force, followed a few days later by (b) smaller and rather informal grade-level meetings (or meetings of the "primary team," the "upper elementary team," the "grades 6-8 team," and so forth). At these small group teacher meetings, one or more task force members ask for teacher reactions to the proposals made so far (which usually can be summarized in a relatively brief handout), and then record these reactions in writing. In our state, it is especially important that the task force members make clear what the State Department requires and how the proposals developed so far take these requirements into account. But the main point of the reaction sessions is to listen to faculty.

On the basis of feedback obtained from the small group meetings with colleagues, the task force usually refines its proposals. While it is never possible to accommodate each and every teacher's views, it is important for the task force to be clear about which views it is accommodating and which it chooses not to, and the rationale for each set of decisions.

Finally, it generally is wise to submit the work accomplished so far (including a summary of how feedback from staff was obtained and what was done with it) to the curriculum leadership council. The council may have further suggestions for the task force to consider, or may decide to present the proposals as they stand to the superintendent.

Grade Level or Course Goals

The scope and sequence summary, supported by the philosophy statement and program goals, provides a framework within which grade level and course goals can be developed. In this section I would like to talk briefly about the characteristics of grade level or course goals and then describe a process that might be used to develop them.

Characteristics. Grade level or course goals are more specific than program goals, but they are not as specific as the kind of instructional objectives usually associated with individual lessons. Here is an example from language arts of how a grade level goal might "fit between" a program goal and an instructional objective:

Program Goal
- Be able to communicate effectively in a range of settings and for a variety of purposes.

Grade Level or Course Goal:
- Be able to describe objects, events, and experiences using specific language and appropriate detail.

Instructional Objective:
- After a presentation and discussion about the difference between specific and general descriptions, students will write a specific description of one of the exhibits we saw on our field trip to OMSI yesterday.

Display 2-8 provides further examples of grade level or course goals.

If you look at the examples of goals shown above and in Display 2-8, you'll note that some grade level or course goals, even though they are more specific than program goals, are still rather general and may apply across several grade levels. For example, the goal "Be able to describe objects, events, and experiences using specific language and appropriate detail" probably would be taught (and receive considerable emphasis) over many years. What would change from one grade to the next would not be the goal per se, but the complexity of the events or experiences students described, the maturity of the vocabulary they used, and so forth. Similarly, the fifth grade goal in science shown in the display, "Recognize information needed to solve a given problem," is still general

DISPLAY 2-8

EXAMPLES OF GRADE LEVEL OR COURSE GOALS

(Based on state-adopted "Common Curriculum Goals")

Social Studies

Grade 5: Identify ways individuals and groups influence and change government in the U.S. (e.g., vote, write letters, media, organizations).

Grade 11: Evaluate the effectiveness and ethics of various group strategies for effecting political change (e.g., letter writing, civil disobedience, boycotts).

Mathematics

Grade 5: Sketch top and side views of rectangular solids.

Grade 11: Use protractor, compass, ruler, computer and other instruments to make common geometric constructions.

Science

Grade 5: Recognize information needed to solve a given problem.

Grade 11: Develop testable questions which may contribute to the solution of a problem.

enough to be included as a goal statement for several grades.

Some curriculum specialists maintain that grade level/course goals should be written at a specific enough level so that each grade and course has a distinctive set of goals that do not overlap with those developed for other grades or courses. In my experience, however, this is neither feasible nor desirable. There are too many skills and processes that can't be broken down into discrete grade level goals, unless you add a great deal of detail, which ends up bogging everyone down. I propose a simple guideline: Whenever feasible, write goals that are specific to a grade level or course. When you are dealing with a broad skill, process, or theme that does not lend itself to grade-by-grade sequencing, then go ahead and write a goal that extends over multiple grades. The classroom teacher can them develop that general goal into more specific and distinctive objectives.

I would also emphasize that the characteristics of the grade level/course goals depend in part on earlier agreements reached by the curriculum leadership council. If the aim of the curriculum development project is to create a core program in a subject area that applies to ALL students, then the task force must insist that all the grade level/course goals are truly essential for all students. This does not mean that the goals should be simple or easy to attain, but it does mean that the curriculum should not be so specialized or narrow that only a certain group of students would benefit from it.

Process of Development. As far as the process of goal development is concerned, I would recommend five stages. These five stages are summarized in Display 2-9 and discussed in more detail below.

During the first stage, the development task force works together in drafting six or eight goals at several grade levels in a particular strand. The purpose of this initial collective drafting effort is to make sure that task force members are on the same wavelength when writing goals. Does one person's idea of an appropriate level of generality for a goal match the other task force members' ideas? Do people see eye-to-eye about what constitutes an essential goal, as distinct from one that might merely be desirable? Do individuals agree on what is clear or unclear, precise or vague? During this phase, task force members generally spend a few minutes either individually or in pairs drafting a few goals as a basis for the discussion. Then, after discussion, a few more goals are drafted and reviewed. This process is repeated until the group internalizes a common set of understandings about goal writing.

DISPLAY 2-9

A SUMMARY OF FIVE STAGES OF GOAL WRITING

1. Developing a shared understanding about goal-writing. The task force as a whole works together in generating six to eight goals and then reviews them carefully to help reach consensus about what constitutes a good, clear, and appropriate goal.

2. Becoming more familiar with pertinent state goals. The task force as a whole reviews the section of the common curriculum goals that pertains to the strand of the curriculum they are going to work on first. They note points of emphasis in the state's goals that they will need to keep in mind when formulating their own goals.

3. Breaking into groups of primary, upper elementary, middle, and high school to draft an initial set of goals for a strand. These smaller groups draft a set of goals, guided by the scope and sequence and philosophy agreed to earlier as well as the understandings about goal writing developed during phase one.

4. Coming back together as a large group to critique the goals. Task force members review the initial drafts of goals and make suggestions for improvement.

5. Selecting an "editor," who will revise the goals in light of the task force's suggestions. The editor's work will then be reviewed by the task force as a whole.

The second step is for the task force to select one strand as an initial focus for their goal-writing effort. The task force then reviews the section of the common curriculum goals that pertain to this strand and become more familiar with the goals set forth by the state at grades 3, 5, 8, and 11. Team members may wish to take notes, indicating in brief the points of emphasis in the state's goals. However, since the purpose of developing your own curriculum is to create a document that reflects your own best thinking and writing, it is important to view the state goals as a frame of reference, not as a blueprint. You will want to keep the state goals in the back of your mind when writing, but you do not want to try to replicate literally those goals. (Unless, for reasons stated in Chapter One, you plan on adopting the state curriculum. If you have made this decision, then this entire section on developing your own curriculum is essentially irrelevant.)

The third step is to divide into primary, upper elementary, middle, and high school groups. Each group then drafts goals for its level, guided by the scope and sequence summary prepared earlier and the collective agreements about goal writing generated in stage one. I recommend that all groups work on one common strand until a rough draft of goals for the strand is done.

Then, in stage four, the separate grade level teams convene as a whole to review what has been produced. They critique the goals, looking to see whether they are truly essential, clearly stated, consistent with the scope and sequence and philosophy established earlier, allow for reasonable breadth and depth in learning, and so forth. (At this point, ideas for refining the scope and sequence also might surface and warrant discussion.)

During the last stage, one or two team members with special writing skills are elected to serve as "editor." The editor is given additional released time or stipends to revise the goals based upon the group's critique completed during stage two. The editor then submits the revisions to the group for final review before colleagues outside the task force are asked to comment on the draft. The reason I recommend the use of an editor is that a task force as a whole is not an efficient vehicle for refining written products.

Once an entire strand is completed, the cycle can be applied to each of the other strands.

Documentation of Match Between State Goals
and the District's Curriculum

The state requires that each local district incorporate within its curriculums the Common Curriculum Goals the state department has developed in each subject area (e.g., language arts, mathematics, science, health, physical education) and the Essential Learning Skills that cut across the Common Curriculum Goals. Since the State Department already has integrated the Essential Learning Skills in each Common Curriculum Goal document, you can meet the requirement of incorporating the essential learning skills by incorporating all the Common Curriculum Goals (except in those areas such as driver education and foreign language where no common curriculum goals are being developed).

I recommend that two procedures be followed to document that state goals have been properly addressed in your curriculum. The first is to review each state goal at grades 3, 5, 8, and 11 and make sure there is a corresponding goal in the district's curriculum either at these grades or at a lower grade. (You are permitted to teach a state-mandated goal at one or more grade levels below that set by the state, but you cannot delay teaching the goal until a higher grade). A local goal may be stated more broadly or more narrowly than the state's, or contain a somewhat different emphasis, but as long as the basic intent of the state's goal is addressed in the local curriculum, you have met the requirement. Also, one local goal may encompass two or more state goals (and vice versa). In any case, as you are carrying out this review, write an identifying code or term from your curriculum next to each state goal that indicates where in your curriculum the state goal can be found. Here is an example:

State Goals in Science	Related District Goals
Goal 2.10a: Design a procedure to test a hypothesis	Goals 3.5 & 3.6

Then, if you find that a state goal is not represented in your curriculum, add the goal or a goal of your own making that captures the state's intent. When you have completed this process, you will have a record that teachers, administrators, and members of state standardization teams can look to as evidence that the district has incorporated state goals in its curriculum.

The second step is to work backward from your district's curriculum goals to the state's. To do this, list beside goals in your curriculum document, either in the left hand margin, in a separate column to the right of the goal statements, or in some other visible place, corresponding state goals. This shows how various local goals match state goals. (Note that some local goals probably will not be identified as having a corresponding state goal because districts have the prerogative of including goals over and above those mandated by the state.) When you complete this process, teachers and administrators will be able to see easily how the curriculum they are working with integrates state goals.

District Curriculum	Related State Goal
3. Distinguish between testable and nontestable hypotheses	2.8
4. Use information and questions to develop a testable hypothesis	2.9

Suggestions for Adopting or Adapting a Curriculum Produced Elsewhere

If the task force finds a curriculum that has the general content and form it is seeking, and meets state curriculum requirements, then it needs to determine whether this curriculum should be adopted as is, or whether some refinements need to be made. In order to make this determination, the task force might ask these basic questions:

- Should anything be ADDED to the curriculum? (For example, a particular science curriculum might be lacking in goals dealing with career applications).
- Should anything be DELETED? (For example, a social studies curriculum might contain too much detail about specific battles of the American Civil War or other wars).
- Should anything be REORGANIZED? (For example, large strands, such as the "receptive" and "expressive" strands in language arts, might need to be broken into several smaller strands, such as listening, reading, speaking, and writing).
- Should anything be SEQUENCED DIFFERENTLY? (For example, various critical thinking or problem solving goals might need to be introduced in earlier grades than a particular curriculum indicates).
- Should anything be REWORDED OR EDITED IN OTHER WAYS? (For example, some goals might need to be made clearer or more specific).

One way to organize a review of the external curriculum against the above questions is to divide the task force into small groups, each responsible for a particular set of grade levels (e.g., K-3, 4-6, 7-8, 9-12). Each small group would then review that portion of the curriculum that pertained to its grade level assignment. The groups would spend perhaps a half day asking the questions listed above and formulating their answers. Then the task force as a whole would reconvene to discuss the ideas generated in the small groups.

In most cases, the small groups will probably find some areas in the external curriculum that need to be refined, even if only slightly. In other words, generally, the recommendation will be made to adapt an external curriculum, rather than to adopt it completely as is.

If the task force does identify some needs for modification of the external curriculum, then the issue is how best to make the modifications. This will depend to a large degree on what type of modifications are proposed. If the proposed modifications consist primarily of rewording/

editing goals, for example, then one or two task members with special writing skills might be asked to make these revisions. If more substantive changes are proposed, such as adding a strand or substrand and the goals related to it, then the small group that originally proposed the changes probably should go ahead and draft the changes, and then share their work with the large group. It also is worth noting that some proposals for change are very straightforward and do not require further work. For example, if a task force decides to delete some goals, it need only cross them out; no new development or editing is needed.

Whether you adopt or adapt an external curriculum, you will need to make sure that the match between this curriculum and the state's common curriculum goals is clear. Obviously, if you adopt or adapt the state's goals, you don't have to worry about this, unless you reorganize or rewrite the goals in such a way that their connection to the original state document is not immediately apparent and must be explicitly shown. If this is the case, please see the section on documenting the match with the state curriculum that appeared earlier in this chapter.

TEXTBOOK SELECTION

Although texts are only one of many types of instructional materials, in most subject areas they play a particularly large role in instruction, and in most districts they represent a significant portion of the budget. In Oregon and many other states, moreover, the textbook selection process is considered by the public to be so important that it is governed by statute. Oregon school districts are required to purchase new texts in each subject area every six years from among those adopted by the State Board of Education or to submit a proposal to the Oregon Department of Education for an independent textbook adoption. In view of the significance of textbook selection in Oregon, the handbook devotes a separate section to this topic.

Organizing for Textbook Selection

Deciding Whether to Use a Consortium or Within-District Approach to Initial Text Screening

It is increasingly common for small school districts to send one or two representatives to a cross-district, consortium-sponsored textbook review committee, which examines the texts on the state adoption list in a given subject area and then narrows the field of texts to a few finalists. Individual school districts within the consortium then look very closely at each of the finalists and make their selection from this smaller pool. By sending a representative or two to the consortium committee, small districts can learn about all the texts on the state adopted list, without having to require the entire staff to review each book on the list. Using this approach, moreover, means that when the time comes for the entire staff to review texts, the number of texts they must consider is limited to two or three finalists.

In the past, districts often had very different curriculums and therefore frequently lacked a common basis for reviewing texts. But with the advent of the state's common curriculum goals, districts' curriculums increasingly share much content and many specific goals in common. This facilitates consortium approaches to text review, as it does consortium approaches to curriculum development.

Mid-sized to large districts typically have the staff and resources to do their own text review and selection, and may find it unnecessary and possibly even constraining to involve themselves with a consortium of

other districts. But even larger districts have in some cases benefited from a consortium approach, especially if the ESD can help provide administrative and/or technical support to the consortium.

Deciding Whether or Not to Establish a Separate Textbook Selection Committee

If your district is very small (e.g., it consists of a single building with four or five teachers) the staff as a whole will probably serve as both the curriculum development task force in a subject area and the textbook selection committee. Separate and distinct groups will not be necessary or even feasible.

If your district is of mid to large size, however, it might be helpful to create a separate text selection committee. Establishing a new committee, rather than relying solely on previously established planning and development groups, is a way of involving more people in the critical task of text evaluation and selection. It also provides for a further division of labor in the curriculum improvement process.

Even if you create a separate text selection committee, however, you may want to ask the original task force that prepared the curriculum to narrow the field of texts to a few finalists. This will allow the original curriculum development task force to offer its expertise in the textbook review process and will allow the text selection committee to give more in-depth attention to the texts it reviews.

Deciding How Best to Obtain Feedback from the Total Staff and from the Public

You will no doubt want to establish a procedure by which the staff as a whole can provide input to the text selection committee (unless, as indicated above, you are in a very small district, where the staff as a whole functions as the selection committee). To prepare staff to give feedback, members of the selection committee will probably first want to provide faculty with an orientation to the district's text adoption process and the criteria established to guide selection decisions. Staff also may be asked to note any particular strengths and weaknesses in currently used texts that they would like the selection committee to keep in mind when screening texts.

After the initial screening of texts is completed, copies of the textbook finalists might be placed in easily accessible places in each school building. The faculty may be invited to review these finalists and to indicate their preferences to the text selection committee representative(s) in their building.

You probably will also want to establish a procedure by which members of the community can provide input into the selection process. If you have a standing lay advisory council on curriculum (see Chapter One), you may ask this group to review the finalists and indicate its preferences to the selection committee. As an additional or an alternative strategy, you may place copies of the finalists in easily accessible public locations, such as the town library, and the library or media center of each school building, and invite the public, through notices in school newsletters and in the local newspaper, to review the books and submit written reactions to the district office, or to respond verbally to the finalists at an evening meeting.

The text selection committee generally would be expected to consider input from the staff as a whole and from the public at large in formulating its recommendation to the superintendent and board about the text to be adopted.

Making Policies to Guide Text Selection

Deciding Whether to Require that a Single Series be Adopted Across Grades or Whether Different Series May Be Selected

One basic policy question that the curriculum leadership council needs to address is whether the district will require selection committees to select a single textbook series in a subject, or whether committees may choose texts from different series for different grades.

Many districts have a policy stipulating that a single series must be chosen for a designated number of grades, such as grades 1-5 or 1-6. This policy is guided by the assumption that a single series across grades will optimize continuity of instruction.

Other districts permit selection committees to adopt different series at different grades. A different text might be selected for grades 1 and 2, for example, than for 3 and 4. The rationale for this policy is that some series are better, or more closely aligned with the district's curriculum,

at some grades than at other grades.

There seem to be pros and cons on both sides of the issue; the curriculum leadership council will need to weigh both and make a decision about this matter.

Deciding Whether or Not All Schools Within the District Need to Adopt the Same Text

In most districts I know, texts are adopted on a district-wide basis. That is, a selection committee makes a single recommendation that all schools within the district follow. The advantage of this is that if a student transfers from one building to another, he or she will still be using the same text. Also, teachers from different schools will be able to communicate about instructional issues more easily if a common text is used throughout the district.

The possible disadvantage is that two schools within the same district, using the same curriculum, may have good reasons for preferring different texts. A district-wide adoption may force an unnecessary level of uniformity across schools. The curriculum leadership council will need to provide guidelines on this issue.

Evaluating Texts

Identifying Text-Dependent Goals

Some goals in your curriculum will be more dependent on textbooks for instruction than others. For example, in health, a goal dealing with the dangers of chewing tobacco (a serious problem in Oregon and the West) might be taught using some of the excellent videotapes on this subject and handouts from state health departments; teachers might not need a text to teach this topic. On the other hand, in mathematics, teachers might not have the instructional materials at hand to teach newly emphasized areas of statistics, probability, and visualization skills in geometry without the aid of a text.

It's probably best to evaluate a text according to how helpful it will be in teaching toward those curriculum goals that require a text, rather than holding the text accountable to goals for which other, non-text instructional resources are already available. Therefore, the curriculum development task force, or whatever group is to do the initial screening of texts from the list of state adopted books, probably should begin by

distinguishing those goals that seem clearly text dependent from those goals that do not appear to require, or lend themselves to, textbook instruction.

Choosing and Using Evaluation Criteria

The State Textbook Commission has used detailed sets of criteria to guide text evaluation at the state level. For example, several years ago, in the Language and Composition Category of Language Arts, the Commission listed 68 criteria against which evaluators were to rate books submitted to them. Criteria were set for student materials (e.g, "present factual information accurately," "are based on current research," "provide sufficient, appropriate explanations and examples to demonstrate the skills and knowledge presented.") Criteria also were set for teacher materials (e.g., "establish definite instructional objectives for each lesson," "suggest content and activities for students with different interests, abilities, or special needs."). And a few criteria related to the program as a whole.

If your district has the time and staff to use such detailed sets of criteria, terrific. However, few districts can afford to devote the time and resources required to evaluate books in such detail. If time and resources are limited, you need to develop a more streamlined and practical set of criteria.

One approach would be to ask the following about each text you are considering:

What percentage of text-dependent goals in the curriculum are:

1. TAUGHT THOROUGHLY AND WELL?
2. MERELY TOUCHED ON?
3. NOT ADDRESSED AT ALL?

After reviewing a text in science using the above criteria, you might come up with a summary report like this:

> About 40 percent of the text-dependent goals were taught thoroughly and well. Most of these goals dealt with the content of science. Content dealing with body systems was especially well developed and organized.

About 45 percent of the text-dependent goals were merely touched on. Most of these goals dealt with unifying concepts in science and scientific processes. The text referred to key concepts and processes, but didn't provide students with the level of explanation, examples, and application activities that would enable them to learn the material well.

About 15 percent of text-dependent goals were not addressed at all. These were goals dealing with career applications in science and the social and political aspects of science.

If the kind of general criteria discussed above aren't discriminating enough to permit the committee to pick one clear "winner" out of the texts being considered, then you might want to do a more complete "skills trace," as Connie Muther, a nationally recognized authority on text selection puts it, to provide additional information on text quality. A skills trace involves identifying a single skill (or a broad concept or theme) and determining and evaluating how that skill is introduced, taught, practiced, and tested either within a single grade (a "horizontal" skill trace) or across two or more grades (a "vertical" skills trace). As part of this intensive review, you would examine the teacher materials, the student materials, pre and post tests, and any teacher resource books or audio-visual materials that are considered essential to the program. You would look to see how well each component and each lesson that dealt with the designated skill related to each other and fostered student learning.

On the basis of a skills trace in math, for example, you may find that there is a mismatch between the original text presentation of a concept and the practice problems that follow. Or in social studies, you might find that the same concept or skill is dealt with in almost the same way over two or three years, with little progressive elaboration or application. Skills traces might spotlight these problems.

ASSESSMENT

Assessment is a much discussed topic in Oregon schools, not only because it is an important topic in its own right, but because the Oregon Standards for Public Schools put so much emphasis on student and program assessment (Standards 602 and 606).

This section deals with the development or adaptation of resources for assessment.

Clarifying Basic Distinctions

Let's begin by making a few fundamental distinctions.

Teacher-Managed and District- Managed Assessment.

Teacher-managed and district-managed assessments represent the two basic levels of assessment dealt with in this handbook and emphasized in the Oregon Standards for Schools.

Teacher-managed assessments are the assessments that teachers use on a day-by-day and unit-by-unit basis in the classroom. These include informal assessments, such as oral questions teachers ask to check students' understanding before, during or after a presentation, semi-formal assessments, such as worksheets and written homework assignments, and formal assessments, including tests and structured evaluations of student products or performance (e.g., a formally graded science project or oral report). The main purposes of teacher-managed assessments are to facilitate teaching and learning in the classroom and to provide a basis for grading students.

District-managed assessments are assessments that the school district selects or develops and for which it sets conditions of administration and use. Standardized tests are the best known examples of district-managed assessments, though district-managed "curriculum-referenced" measures (see below) are increasingly common. The main purposes of district-managed assessments are to evaluate the effectivenesss of instructional programs, to aid in student placement and selection decisions (e.g., selecting students for a talented and gifted

program) and, in some cases, to certify whether students have attained the "competencies" considered necessary to graduate from high school.

Paper and Pencil and Performance Assessments

Paper and pencil assessments are widely used in American schools. They consist of multiple choice, essay, and other traditional test formats. These assessments, when well designed, can provide valuable information on students' acquisition of academic content and skills.

However, in recent years, educators and measurement specialists alike have focused attention on the limitations of paper and pencil measures as indicators of higher order learning, such as the ability to solve real life problems that have no single solution or the ability to engage in well reasoned and open debate on controversial issues.

In light of the limitations of paper and pencil measures, some districts have begun to include in their assessment programs performance measures that call for more active and sustained applications of learning than traditional paper and pencil measures. For example, a performance assessment might require students to design and carry out a project or laboratory investigation, create a plan or product, or prepare and deliver a speech. Some performance assessments are designed to be carried out on an individual basis and others on a group basis.

The main obstacle districts face in using performance assessments as part of a district-wide assessment program is not so much in designing the assessments as it is in evaluating student responses. It takes much time and effort to develop trustworthy procedures for rating student products or performances, to train people in using these procedures, to carry out the rating process, and to prepare reports to students, teachers, administrators and the community on the assessment results. District-wide student performance evaluations make greater demands on the human and financial resources of a district than do traditional paper and pencil tests.

In the 1990s, as new options are developed for managing performance assessments in practical, cost-efficient ways, more and more districts are likely to incorporate this form of measurement in their assessment programs.

Curriculum-Referenced and Norm-Referenced Assessments

The distinction between curriculum-referenced and norm-referenced assessments is important to keep in mind when planning assessment programs that support curriculum improvement.

Curriculum-referenced assessments are constructed on the basis of the learning goals in a specific curriuclum. Student performance on these assessments is reported in terms that indicate how well students have mastered the curriculum, independently of how well or poorly other students might have done. Typical reports for curriculum-referenced measures pinpoint goals that students have mastered, goals that they have partially mastered, and those they have not mastered.

Curriculum-referenced measures may consist of paper and pencil or performance assessments, depending on the kind of goals emphasized in the curriculum. As indicated above, the more a curriculum emphasizes active, higher-order, and application-oriented learning, the stronger will be the need for performance measures.

Norm-refenced assessments, of which leading standardized achievement tests (CTBS, CAT, ITBS, etc.) are the most salient examples, are intended to highlight differences in students' general knowledge and skill in a subject area , not to determine whether students are meeting the specific goals in a district's curriculum. Student performance on norm-referenced assessments is reported in terms that show how well students have done compared with other students in the nation. (Percentiles and stanines are common examples of norm-referenced scores.) A norm-referenced score does not really indicate what a student knows or can do; it simply shows whether he/she demonstrated more or less knowledge/skill than others who took the test during the period in which the test was "normed."

In the context of this handbook, curriculum-referenced measures are more important sources of information than norm-referenced information because the information they provide is more directly relevant to making instructional decisions. Norm-referenced measures do provide a useful picture of students' general academic achievement in relation to the nation at large. However, from the perspective of planning or evaluating specific curriculum improvements, the value of norm-referenced information is modest.

Setting Priorities for Development Work in Assessment

Just as districts need to set priorities for development work in curriculum, so too do they need to set priorities for work in assessment. It simply is not possible, or desirable, to try to develop assessment tools in all learning areas, at all grade levels, and for all purposes in the same way, or with the same level of resources. Decisions have to be made about what development work in assessment is most needed.

Setting Assessment Priorities Across Subject Areas

Your district probably has a greater need to develop assessments in some subjects than in others. You may, for example, have a textbook series in a particular subject that contains reasonably good unit and cumulative exams, checklists and rating scales to evaluate students' skill performance, and record-keeping forms. The staff may feel that they can easily supplement the resources provided by the textbook with assessment procedures of their own design. In this case, perhaps no major district-managed development work in assessment would be needed.

By the same token, in another subject, the staff may feel that there are many goals for which good assessment procedures are lacking. In this case, the district probably will need to arrange for the development or selection of new assessment procedures.

The main point here is that development work in assessment ought to take place only in those subject areas that really need it.

Setting Assessment Priorities Within Subject Areas

The same argument developed above with reference to different subject areas applies within a subject area as well. Some learning goals in a particular subject may be easy for teachers or districts to assess without further development work, and others may be difficult to measure unless new resources are developed or selected. In addition, if your district has included "organic" goals in the written curriculum, those broad aspects of student development that are nurtured through the total learning environment (see chapter one), you probably will NOT want to try to develop formal assessments for these goals. For example, you probably

would not feel the need to develop special assessment procedures to determine whether students have learned to cooperate well with their classmates. Teachers can assess student progress in these areas through informal, day-to-day observation; the development of structured assessment procedures would seem unnecessary.

Within a subject area, moreover, some goals may be deemed higher priority than others and may therefore be considered higher priority targets for development work in assessment. Within language arts, for example, the areas of reading and writing might be considered especially important. Whereas a district may not have the time and resources to develop assessment procedures in all strands within language arts, including speaking and listening, the mass media, and study skills, they might feel the need to develop good measures in reading and writing. As indicated in the last chapter, some curriculums designate particular strands or goals within strands as "high emphasis." When this is done, this designation can serve as a guide to setting priorities not only for purposes of instruction, but for purposes of assessment.

Setting Priorities Between Teacher-Managed and District- Managed Assessments

Both teacher- managed and district- managed assessments obviously are essential, but when time and resources are tight, it is difficult to put the same level of emphasis on each when developing assessment procedures.

How much relative emphasis to place on the development of classroom versus district-level assessment procedures would depend in large part on the status of your existing resources in assessment. If, as in one of the examples described earlier, teachers already have good resources for assessment at the classroom level in a particular subject, then there would be little need to target this level for development work. If the district lacked good assessment procedures for evaluating program effectiveness, making student placement and selection decisions, or verifying student "competencies," then district-level assessments would be a reasonable target for development work.

Deciding When to Begin Development Work in Assessment

An important question you will need to decide is whether to begin development work in assessment right after textbook selection or whether to wait a year or so until implementation at the instructional level is well underway. The answer to this question depends in part on how much development work in assessment you anticipate and how much time and energy staff have left over for this work after their participation in curriculum development, textbook review and selection, and related instructional improvement activities.

The advantage of plunging right ahead into development work in assessment is that this emphasizes the close connections between curriculum, instruction, and assessment. If good assessment resources are available in the beginning of implementation, then these resources can support and enhance implementation. They can clarify on a concrete level what students are expected to accomplish in a learning area and can begin providing information on students' progress in gaining mastery over the curriculum. In this sense, the development of good assessment tools is as necessary for curriculum implementation as the selection of good texts and other instructional materials.

The risk of moving right into assessment development, however, is that this may overload staff. Teachers may be preoccupied with understanding a new curriculum, trying out a new text, and developing instructional plans and materials. They might feel that it is too early to focus on assessment. Of course, as indicated below, a task force, rather than the staff as a whole, can do the major development work in assessment. But even a task force may feel that six months or a year of implementation at the instructional level is needed before effective work in assessment development can take place.

Carrying Out Assessment Development

Once you set priorities for assessment and determine when development work in assessment is to begin, you can begin thinking about choosing, adapting, or creating assessment procedures.

Using a Consortium Approach

In earlier chapters and sections of this handbook emphasis was placed on the value of consortia in developing new or improved products. Consortia are especially valuable in the selection or development of curriculum-based assessments, since few districts have the resources or technical expertise to carry this out completely on their own. You'll need to decide whether or not to affiliate with a consortium in developing your district's curriculum-based assessment capacity.

Finding Good Models

Whether your district is working within a consortium or on its own, it's wise to identify and take advantage of existing assessment procedures rather than beginning from scratch. In the past five years, many organizations have produced or collected resources for assessment that relate to well-defined learning goals and objectives. Although you often have to adapt or extend existing resources to match your curriculum and your information needs, it's best to start with existing products and avoid reinventing the wheel . Display 2-10 lists organizations that you might consult to obtain assessment resources.

Practical Criteria For Reviewing and Selecting Assessments

Once you identify and obtain assessment resources, you need to review them and decide whether or not they might make a contribution to your district's curriculum-based assessment program. I would suggest two basic criteria against which to review assessments. The criteria are stated below, followed by simple rating scales that might be used to summarize results from applying the criteria:

Display 2-10

ORGANIZATIONS THAT PROVIDE RESOURCES FOR ASSESSMENT

Oregon State Department of Education
ODE has assembled model assessment procedures in various subject areas at different grade levels that match common curriculum goals. They also have prepared reports on assessments in different subject areas that identify key concepts and issues in assessment in that particular subject and identify and illustrate desirable assessment practices. Contact the Evaluation Department, Oregeon State Department of Education, 700 Pringle Parkway, Salem, OR 97310-0290. Phone: 378-4974.

Test Center, Northwest Regional Educational Laboratory
The Lab's Test Center maintains a large collection of tests, test item pools and banks, and performance assessment procedures that have been developed in both this country and abroad. These assessment resources are organized by subject and skill area and are described in a user's catalogue. You may borrow resources from the Center for review purposes. The Center also will provide order forms to help you purchase test materials. In addition, the Center publishes analyses and reviews of tests in areas of special interest to schools, such as tests of higher order thinking skills. Contact the Northwest Regional Educational Laboratory, 300 S.W. 6th., Portland, OR 97204. Phone: 248-6800.

Northwest Evaluation Association (NWEA)
NWEA has developed extensive test items banks in reading, language usage, math and science. The items in these banks are keyed to specific learning objectives. The organization also has developed a book of writing assessment prompts based on prompts used in school districts throughout the Northwest. NWEA also sponsors conferences and workshops on new assessment concepts and procedures. Contact Allan Olson, Director of NWEA, for more information (624-1951), P.O. Box 2122, Lake Oswego, OR 97035.

Valley Education Consortium (VEC)
VEC has developed examinations at selected grade levels in reading and literature, writing and language usage, math, science and technology, and social studies. These examinations directly match VEC's curriculum in these areas, which in turn matches the state's common curriculum goals. VEC's examinations are intended for use at the district level. VEC also has recently begun to provide workshops for teachers on goal-based instruction and assessment and for administrators on the management and evaluation of goal-based instructional programs. Contact MaryAnne Escott, Coordinator, VEC Service Center, c/o Yamhill ESD, 800 E. 2nd., McMinnville, OR 97128. Phone: 472-1431.

1. How closely does the assessment (be it an individual item or procedure or a complete exam) match the learning goal(s) you want to assess?

   1=Very close match
   2=Reasonable match, though some refinement/extension of the assessment's content would be needed
   3=Insufficient match: the assessment has little or no potential for measuring our goal(s)

2. How well done is the assessment?
   --clarity and appropriateness of teacher and student directions
   --clarity and appropriateness of the material, topics, problems, or questions to which students must respond
   --clarity and appropriateness of the criteria for scoring responses.

   1=High Quality
   2=Reasonable Quality, but some refinement in one or more of the areas listed above (e.g., student directions, writing topic) would be needed
   3=Insufficient Quality: not worth trying to refine

The second criterion, which deals with quality, would not be considered unless the assessment received a rating of one or two on the first criterion, which deals with the assessment's match with the curriculum.

Adapting or Developing Assessments

Generally, districts need to do some adaptation of existing assessment procedures and some development of new procedures in order to measure various goals in a curriculum that they recently have developed or updated. I recommend that only those teachers with a special interest in assessment and a demonstrated talent in writing be asked to participate in the adaptation or development of assessments. At least some of these teachers should be members of the task force that developed the curriculum, since these teachers are most familiar with the curriculum's content and the concepts that guided its development.

Teachers who serve on assessment development teams do not necessarily need formal training in measurement, but they do generally

desire and benefit from technical assistance, especially from a measurement specialist(s) with a strong background in the particular type of assessment being developed, such as writing assessment, science concept assessment, reading comprehension assessment, or various types of performance assessments. Such specialists often are in a good position to obtain the models in assessment referred to earlier and to conduct a preliminary screening of items using the criteria shown above. This will save the development group time and serve to highlight the qualities of assessment that the group probably will want to strive for when developing new items.

It is beyond the scope of this handbook to provide specific guidelines for constructing assessments. Fortunately, in recent years, practical guidelines for developing assessments serving different purposes and covering different subject areas have been developed. See the list of resources at the end of this chapter for information on where these guidelines can be found.

Additional Resources

Along with the resources listed at the end of Chapter 1, you may wish to consult:

Archbald, D. & Newmann, F. (1988). Beyond standardized testing: Assessing authentic academic achievement in the secondary school. Reston, VA: NASSP.

Brandt, R. S. (Ed.) (1988). Content of the curriculum. Alexandria, VA: Association for Supervision and Curriculum Development.

Carlson, S. B. (1985). Creative classroom testing. Princeton, NJ: Educational Testing Service.

Cody, C. B. (1986). A policylmaker's guide to textbook selection. Alexandria, VA: National Association State Boards of Education.

Elliott, D. L. & Woodward, A. (1990). Textbooks and schooling in the United States (89th Yearbook of the National Society for the Study of Education). Chicago: University of Chicago Press.

Eugene School District (1989). Education 2000: District 4J Integrated Curriculum K-5.

Fielding, G. D. (1990). A study of Oregon's textbook adoption policies and procedures. Salem, OR: Oregon Department of Education.

Fielding, G. D. (1989). Describing curriculum development from the inside out. Journal of Curriculum and Supervision. 4 (2), 187-196.

Fielding, G.D. & Shaughnessy, J. (in press). Improving classroom testing: Why training is not enough. NASSP Bulletin.

Gall, M. D. (1981). Handbook for evaluating and selecting curriculum materials. Boston, Allyn and Bacon.

Girod, G. R. (Ed.). (1989). The Textbook Dilemma. Bridge (Oregon Association for Supervision and Curriculum Development), 1 (4), 1-11 (entire issue).

Jacobs, H. H. (Ed.) (1989). Interdisciplinary curriculum: Design and implementation. Alexandria, VA: Association for Supervision and Curriculum Development.

Miller, R. W., & Erickson, H. E. (1985). Teacher-written student tests: A guide for planning, creating, administering, and assessing. Washington, D.C.: National Educational Association.

Mills, R. P. (December 1989). Portfolios capture rich array of student performance. The School Administrator, 8-11.

Muther, C. (1985). The pitfalls of textbook adoption and how to avoid them. (Video cassette and user's manual.) Alexandria, VA: Association for Supervision and Curriculum Development.

Priestly, M. (1982). Performance assessment in education and training: Alternative techniques. Englewood Cliffs, N.J.: Educational Technology Publications.

Schalock, D., Fielding, G., Schalock, M., Erickson, J., & Brott, M. (1985). Integrating teaching and testing with program management. Educational Leadership, 43 (2), 55-58.

Shoemaker, B. J. (1989). Integrated education: A curriculum for the twenty-first century. OSSC Bulletin, 33 (2), 1-46.

Stiggins, R. J. (1984). Evaluating students by classroom observation: Watching students grow. Washington, D.C.: National Education Association.

Stiggins, R. J., Rubel, E., & Quellmalz, E. (1986). Measuring thinking skills in the classroom. Washington, D.C.: National Education Association.

Tyson-Bernstein, H. (1988). America's textbook fiasco: A conspiracy of good intentions. Washington, DC: Council for Basic Education.

3. IMPLEMENTATION

Developing a new or improved curriculum is one thing. Putting that curriculum into effect is something else. If curriculum development is to lead to positive changes in teaching and learning then explicit attention must be given to the process of implementation.

In this chapter we focus on three aspects of implementation. The first consists of the plans and procedures that teachers develop to make the district-adopted curriculum (and curriculum related resources for instruction and assessment) functional in the classroom. This level of implementation involves a kind of development work. However, it is not the district-wide development work discussed in Chapter 2, but the development work that teachers as individual professionals and grade-level or department team members engage in. I place special emphasis on planning for instruction and assessment and on recording and reporting information on student learning because in my experience teachers have a great deal of concern about these facets of implementation, especially in view of their prominence in State Department standardization visits.

The second aspect of implementation addressed in this chapter is staff development and support. This is an absolutely crucial process. Since so much has been written about staff development during the past few years, and since so many conferences, workshops, and courses on staff development have been provided in Oregon during the past few years, in this chapter I simply summarize some key points.

The last aspect of implementation dealt with in this chapter is the clarification of roles, tasks, and timelines. Many implementation efforts fail because people are very uncertain about who is supposed to do what, when. This brief section is essentially a reminder to make as clear as possible people's responsibilities in the implementation process and when responsibilities are to be carried out.

Planning for Instruction and Assessment

One way to begin thinking about implementation is to develop expectations about the kind of instructional and assessment plans that teachers might prepare to put a new or updated curriculum in place. Teaching plans usually are developed at different levels of generality, from quite general yearly plans to more specific unit, weekly, and daily plans.

Yearly Planning

A yearly plan provides a general framework for instruction and assessment. It also may be used to communicate to parents, students, and the community the focus of a year's work in a particular subject.

Generally, a yearly plan includes an overview that summarizes in a few lines the content and skills that will be emphasized over the year. It also typically indicates the textbook, major supplementary instructional resources, and major assessment procedures to be used. Finally, a yearly plan shows when various strands or broad goal areas in the curriculum are to be taught during the year and about how much time will be allocated to each. An example of a yearly plan in mathematics is shown in Display 3-1

Unit and Weekly Plans

A unit is generally viewed as a two to six week segment of instruction with a coherent focus. This focus might be a single goal area, such as fractions in math or the origins of U.S. government in social studies. A unit might also focus on two or more goal areas within a subject, such as a unit in language arts that integrates reading, writing, and speaking or a unit in health that integrates various critical thinking skills with health-related content. Finally, a unit might focus on goals from different subject areas, such as a unit on the concept of evidence that examines this concept from the perspective of science, law, math, and English (Ackerman, 1989).

Unit plans certainly can be designed in different ways. One way that often works well is to break the plan into two parts. The first would contain:

- A title for the unit
- The approximate dates during which the unit will be taught
- Goals for the unit (the numbers of corresponding "common curriculum goals" might also be included here)
- Major instructional resources and strategies to be used
- Major forms of assessment to be used

The second part would contain a map of instruction for each week of the unit. This would show the specific goal(s) to be emphasized each week (based on the unit goals shown in part one of the plan) and a brief listing of

DISPLAY 3-1

AN EXAMPLE OF A YEARLY PLAN

MATH, GRADE 5

Adapted from an Illustrative Plan Developed by
the Valley Education Consortium

Overview
Grade 5 math emphasizes problem solving and relating mathematics to the real world. Skills developed in earlier grades in whole numbers, decimals, fractions, place value, and measurement will be maintained and extended. In geometry, probability, and statistics new skills will be developed, including drawing symmetrical models, locating points, collecting data, and using data to create line graphs.

Textbook
Mathematics Unlimited, Holt

Supplementary Materials
Lane County Problem Solving, Quizzles, Mathimagination, Estimation and Mental Math by Reys et el.

Assessment
Textbook tests, teacher-made tests, daily class work, teacher observation, application projects.

Continued on Next Page

DISPLAY 3-1 (Continued)

MATH CURRICULUM:
GRADE: 5

A MAP OF INSTRUCTION FOR THE YEAR

GOALS	INSTR. TIME	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
A. Problem Solving	All year, 1 Day Per Week	X	X	X	X	X	X	X	X	X	X
B. Numeration	2 Weeks	X									
C. Whole Numbers											
Add.	1 Week	X									
Subtr.	1 Week	X	X								
Mult.	2 Weeks		X	X							
Div.	3-4 Weeks		X	X	X						
D. Measurement	3 Weeks						X				
E. Statistics & Probability	3 Weeks									X	X
F. Core Geometry	5 Weeks							X	X		
G. Fractions	5-6 Weeks								X	X	
H. Decimals	6 Weeks	X	X	X							

(integrated with numeration and whole numbers)

Maintenance activities for all goal areas may be handled throughout the school year using warm-up activities.

related instructional materials/strategies and assessments. An example of both parts of this form of unit planning is shown in Display 3-2.

A unit plan might also include a brief daily map of instruction, which would identify the goals or objectives for each day of the unit. Typically, however, expectations for day-by-day instruction are shown in daily lesson plans (see below).

Daily Plans

Unit plans provide a framework for developing daily lesson plans. A basic lesson plan communicates what goals and objectives are to guide instruction for a particular day, what materials and activities are to be used, and, when appropriate, what assessments are to be carried out.

More complex and detailed lesson plan formats may ask teachers to specify particular parts of a lesson, such as "anticipatory set" or "guided practice." My own feeling, however, is that preparing detailed lesson plans is not terribly helpful or appropriate for experienced teachers, unless they are learning to use a new model of teaching or are teaching in a new subject area.

Recording Assessment Information

The plans referred to above all indicate the kind of assessments that teachers will use. However, they don't say anything about recording assessment information in "grade books" or comparable documents.

I would like to say a bit about record-keeping because the State Department has been emphasizing the need for "goal-based" records of student learning. The state is saying that simply knowing that students received a particular score on a test, a paper, or a product does not mean that you know what goals a student has or has not attained. State standards now require teachers to keep records that link student scores with goals contained in the district's curriculum.

Teachers express understandable concerns about goal-based record-keeping. They often fear that goal-based record-keeping will take too much time and add to their already burdensome load of paperwork.

Display 3-2

AN ILLUSTRATIVE UNIT PLAN

Course: Biology
Unit: Nature of Scientific Thinking
Dates: October 3-25

Unit Goals

(written in language students can understand)

What you should **KNOW:**

1. The difference between questions that can be studied through scientific means and those that can't.
2. The difference between a scientific and nonscientific approach to studying questions.
3. The way in which a scientist's frame of reference influences his or her choice of questions to examine.
4. The meaning of terms like "hypothesis", "law", "theory", and "model".
5. The role that experiments play in scientific research.

What you should be able to **DO:**

6. Design simple experiments to find out which of several factors, e.g., light, moisture, or temperature, influence the behavior of a given animal or plant the most.
7. Decide whether a particular hypothesis is or is not supported by a given theory.
8. Decide whether the results of a particular study support or put into question a given hypothesis.

INSTRUCTIONAL RESOURCES & STRATEGIES

- Text and handouts
- Nova video
- Guest speaker: Scientist from OSU
- Small group activities and lab investigation
- Lecture, discussion, informal class writing

ASSESSMENT

- Quiz
- Written reflections on class discussions
- Reports from small group activities and lab
- Unit exam

Display 3-2 (continued)

Weekly Map

Week 1: Unit Goals 1-3

- Text, pages 35-44; Nova video
- Class discussion, small group work
- Quiz

Week 2: Unit goals 4-6

- Guest speaker/discussion
- Small group work
- Written reflections due

Week 3: Unit goals 6-8

- Small group lab activity
- Informal writing
- Reports on small group activities and lab due
- Unit exam

NOTE: Information on daily lessons for this unit would be contained in the teacher's plan book or file.

Although a certain amount of paperwork does appear unavoidable, I think that record-keeping can be made manageable if several points are kept in mind. One is that the level of detail you need in a record-keeping system will vary depending on what you are teaching. Certain subjects at certain grade levels might benefit from a reasonably detailed record-keeping system, while other subjects might not warrant such specific treatment. For example, most primary teachers I know are quite committed to keeping specific records on each student's progress toward achieving goals in reading because they devote as much as 30 percent of each day to reading. These teachers understandably maintain less detailed and less extensive records in science, health, social studies, and art, since these subjects are less of a priority at the primary level.

Another point that might be made about record-keeping is that even within high-priority subject areas, the level of specificity in record-keeping will vary according to your instructional focus at a particular point in time. When your instruction and assessment focus on specific objectives, you will probably want to record how well students did on each of these objectives. For example, if you gave a quiz on distinguishing facts from opinions or graded an exercise on complete versus incomplete sentences, you would probably record how well each student did on these assessments. Since each of these assessments focused on a single goal or objective, as long as you in some way indicated this goal focus in your grade book (e.g, you noted "fact-opinion quiz"), you would be documenting students' attainment of specific goals.

But assessments and records do not always need to focus on single goals or objectives. When your instruction and assessment emphasize students' ability to integrate knowledge and skill across different objectives, such as the integration called for in major pieces of writing, complex problem-solving, and long-term projects, then you will probably want to record more general evaluations of students' accomplishments. In other words, goal-based record-keeping does not mean that data must be maintained separately for each and every district-adopted objective. More "holistic" scores, representing learning across multiple objectives, also have a place in goal-based record-keeping systems.

For example, if you assigned a book report that dealt with basic elements of literature (plot, character, setting), interpretive

comprehension, and on personal or creative responses just because the report addressed each of those goal areas. If you noted that the book report addressed these areas, so it was clear to you and the students that the report was in fact related to goals guiding instruction, then you would be meeting state requirements for goal-based assessment and recording.

Reporting to Parents

The State Department requires that information on students' attainment of district-adopted goals be reported to parents. In standardization visits, members of the standards review team invariably ask about this topic.

My main message about reporting to parents is that parents generally neither desire nor benefit from as detailed a record of student learning as you keep in the grade book. Parents may want to know about goals and students' progress toward meeting them, but they don't want to have to read through lengthy or technical sounding goal statements or to review data on each and every goal called for in the curriculum.

Forms for reporting assessment information to parents, which typically are shared during parent conferences, therefore should be briefer and easier to read than the records teachers keep for their own use. An example of a student progress sheet for use in parent conferences is shown in Display 3-3. This form was created by a teacher to emphasize those goals she dealt with during a particular quarter. Another example of a goal-related parent report form is shown in Display 3-4. I created this form to provide an illustration of how the state's common curriculum goals in English Language Arts could be summarized on a single page, and written in simpler language than the original document, for possible use in parent conferences. The match between the goal statements in the parent summary form and the state's original curriculum guide is shown in Display 3-5 .

Staff Development and Support

Staff development and support are key aspects of effective curriculum implementation. Here are some basic suggestions about this topic.

Display 3-3

LANGUAGE ARTS

PROGRESS REPORT

FIRST QUARTER, GRADE 4

Name_____Date_____

\+ Exceeds expectations √ Meets expectations x Needs improvement

Reading, Writing
- Elements of Literature (character, plot, setting) ____
- Book Reports (elements of lit., comprehension, personal response) ____
- Summaries ____
- Stories (prewriting, organization, conventions) ____

Speaking
- presentations ____
- discussions ____

Listening ____

Mass Media
- determining accuracy of information ____

Study Skills
- using textbooks ____
- using graphic aids ____
- dictionary skills ____

Attached is a record of books your child has read this quarter.

NOTES_____

_____

_____

A folder containing samples of student's work is shared with the parents during conference time.

Match with Common Curriculum Goals
(For teacher's own records, not for parents)

	C	C	G	
elements of literature	1.14	1.13		
book reports	1.14	1.5	1.10	1.13
summaries	2.7	2.4	2.5	(1.14, 1.10)
stories	2.7	2.12	(1.14)	
presentations	2.1			
discussions	2.2			
listening	1.7			
determining accuracy of information	1.8			
textbooks	1.4			
graphic aids	1.4			
dictionary skills	1.4			
record of books	1.13	1.10		

Developed by
Donna Kenny
Silverton Sch Dist #4

DISPLAY 3-4

ILLUSTRATIVE STUDENT PROGRESS REPORT FORM IN LANGUAGE ARTS

Grades 4-6

For Use in Parent Conferences

Note: The learning goals below are in summary form. A more complete and detailed listing of our district's goals, which are based on the "essential learning skills" and "common curriculum goals" adopted by the Oregon State Board of Education, is available in a separate document.

√ = Meeting or exceeding expectations
X = Needs improvement

Reading & Literature	**Fall**	**Spring**
•Recognizes common words	_____	_____
•Determines meaning of unknown words	_____	_____
•Identifies main ideas, supporting details, facts, and opinions	_____	_____
•Interprets and evaluates reading selections	_____	_____
•Reads with understanding a variety of forms of literature	_____	_____
Writing		
•Uses appropriately different steps in the writing process (prewriting, drafting, revising, etc.)	_____	_____
•Develops and organizes ideas and reasons well	_____	_____
•Chooses appropriate language and form	_____	_____
•Applies conventions of writing (grammar, punctuation capitalization, spelling) when editing and proofreading	_____	_____
Speaking & Listening		
•Speaks with standard pronunciation and at an appropriate volume and rate	_____	_____
•Uses speaking and listening skills appropriately for a variety of purposes (e.g., give & receive information, express opinions)	_____	_____
•Uses reasoning skills when speaking and listening (e.g., draws inferences; makes logical connections)	_____	_____
•Participates constructively in group discussion	_____	_____
Mass Media		
•Understands and evaluates messages from the mass media	_____	_____
Study Skills		
•Understands assignments	_____	_____
•Uses effective study techniques	_____	_____
•Uses instructional materials and other information resources effectively	_____	_____

DISPLAY 3-5

MATCH BETWEEN THE ILLUSTRATIVE REPORTING FORMAT AND STATE GOALS

GOALS LISTED IN REPORTING FORMAT	CORRESPONDING STATE GOALS	
READING & LITERATURE	**ELS***	**CCG***
•Recognizes common words	1.1	1.1
•Determines meaning of unknown words	1.2	1.2
•Identifies main ideas, supporting details, facts, and opinions	2.1	1.3
•Interprets and evaluates reading selections	3.1,6.4	1.5,1.12,1.14
•Reads with understanding a variety of forms of literature		1.3,1.14
WRITING		
•Uses appropriately different steps in the writing process (prewriting, drafting, revising, etc.)	1.5,1.6	2.4,7.11
•Develops and organizes ideas and reasons well	5.2,6.1	2.5,2.10
•Chooses appropriate language and form	5.3	2.7
•Applies conventions of writing (grammar, punctuation capitalization, spelling) when editing and proofreading	5.7	2.12
Speaking & Listening		
•Speaks with standard pronunciation and at an appropriate volume and rate	1.3	2.1
•Uses speaking and listening skills appropriately for a variety of purposes (e.g., give & receive information, express opinions)	1.3,4.2,4.3,5.5	2.2,2.13,1.6,1.7,2.6
•Uses reasoning skills when speaking and listening (e.g., draws inferences; makes logical connections)	6.5,4.1	2.20,1.8,2.13
•Participates constructively in group discussion		2.3
Mass Media		
•Understands and evaluates messages from the mass media	4.4	1.9,2.14
Study Skills		
•Understands assignments	7.1	1.15
•Uses effective study techniques	7.3	1.15
•Uses instructional materials and other information resources effectively	2.2,7.2	1.4,1.16

***ELS - Essential Learning Skills**
***CCG - Common Curriculum Goals in English Language Arts**

1. The type and extent of staff development and support will vary according to the magnitude of the change being implemented. If you are making just a small revision in the curriculum, staff development might consist of one workshop followed by a few relatively brief discussions at staff meetings. If you are making large changes, staff development might take place over two or three years and consist of a variety of activities, from workshops, to peer observations and "coaching," to frequent grade level or department meetings for identifying and resolving implementation problems.

2. If the anticipated change is large, staff development may well be needed for principals and central office staff, including the superintendent, as well as for teachers. Principals may be expected to facilitate and supervise for program implementation, yet they may need assistance in determining how best to do this. Superintendents may need assistance in determining how best to communicate the focus and process of change to the school board and how best to support principals as they work with staff on change.

3. Consider utilizing the teachers who served on curriculum task forces as leaders of inservice workshops for a faculty. Task force members typically know more about the new or updated curriculum than anyone else. If they are well respected by their peers and have good "people skills," they often make the best inservice leaders. Task force members also may help teachers in their building with specific implementation tasks and problems.

4. Be sensitive to the "stages of concern" that individuals typically experience as they implement a change. These stages of concern are summarized in Display 3-6. In general, people are first concerned about how a proposed change might affect them personally. They then focus attention on how to manage the innovation, to "make it work" on a practical level. Gradually, if the innovation is a good one and staff development and support are adequate, people focus on the impact of the innovation, for example, the impact on student learning and development, and on ways the innovation might be improved.

The focus of staff development therefore needs to vary depending on the concerns that staff are most likely to experience at a particular time. Initially, staff development may consist of an orientation, where people's basic information needs are addressed. Further staff development might

Display 3-6

STAGES OF CONCERN*

0. Awareness
   Not concerned about the change

1. Informational
   Would like to know more about it.

2. Personal
   How will using it affect me?

3. Management
   Will I ever get it organized?

4. Consequence
   Are my students learning?

5. Collaboration
   How does what I am doing relate to what other instructors are doing?

6. Refocusing
   I have some ideas about something that would work even better.

*Based on a program of research carried out at the University of Texas at Austin.

focus on how best to prepare for and manage the innovation. Only after staff is reasonably comfortable with the new or enhanced curriculum is there much point in exploring the impact of the improvement on student learning or on ways the curriculum could be made even better.

This last point raises an important issue in planning for implementation. If you are implementing a major curriculum change, as is typically the case when implementing a newly published set of "common curriculum goals" in a subject area, you need to decide whether you want to focus the first year of implementing this change on instruction alone, or whether you want to focus on both instruction and assessment and their integration. On the one hand, it makes sense to concentrate first on instruction by itself, since teachers typically are concerned with understanding and managing the instructional implications of a change in curriculum before tackling the assessment demands of such a change. Dealing with instruction first, in other words, may respond most sensitively to teachers' stage of concern.

On the other hand, the Oregon Standards place such emphasis on the integration of instruction and assessment in relation to goals that it can be helpful from the very beginning of the implementation process to deal with instruction and assessment as closely linked partners. For example, when providing staff development on "writing as a process," you might show how both instruction and assessment are mutually affected by the emphasis on writing processes. The potential benefit of learning about instruction and assessment together is that what you learn about one can support and enhance what you learn about the other. However, if assessment is addressed hand-in-hand with instruction during the first year of implementation, then it would have to be done in such a way that teachers' management concerns about dealing with multiple changes are sensitively addressed.

Clarifying Roles, Tasks, and Timelines

Identifying who is to do what and when helps to make implementation effective. Roles, tasks, and timelines will vary according to how large an improvement you are trying to implement. Nonetheless, a general example of the kind of task-timeline planning that might be appropriate is provided in Display 3-7. The example focuses on the role of the principal. Similar task-timelines could be developed for teachers, "lead" or "master" teachers, consultants, or superintendents.

DISPLAY 3-7

ILLUSTRATIVE TASKS AND TIMELINES FOR PRINCIPALS (Summer & Fall)

Time	Task
Before school begins in fall	Principal makes sure copies of new curriculum and new texts are available for each teacher.
	Principal (or in some districts the district's curriculum director) makes decision about what level of instructional planning will be required (e.g., Will long term as well as short term plans be required? What are the required components of plans?)
	Principal determines how he/she will supervise for implementation of the new program (e.g. Will instructional plans be collected? Will classroom observations be made?)
	Principals and, if available, central office personnel determine what type of staff development and support will be provided.
	If the school is going to give a pretest in a particular subject area, the principal makes sure that arrangements for administering the test are made and procedures for test scoring and for obtaining test reports are clear.
Inservice Week, Late August	During an orientation session for teachers, principals, in partnership with lead teachers, introduce the new program and indicate the staff development and supervision procedures to be used to facilitate implementation.
Fall Quarter	Principals review teachers' yearly instructional plans. They also attend grade level team meetings to gain an understanding of teachers' initial experience with and reaction to the program.

Additional Resources

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Chenoweth, T. (spring 1989). A principal's road map to effectiveness. OSDC Journal, 1, 5-7.

Flinders, D. (1988). Teacher isolation and the new reform. Journal of Curriculum and Supervision, 4 (1), 17-29.

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English, F. (1987). Curriculum management for schools, colleges, business. Springfield, Ill: Charles Thomas.

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4. EVALUATION

This last chapter focuses on the evaluation of curriculum improvement efforts. Two levels of evaluation are discussed. The first is implementation-oriented evaluation. This concerns the degree to which planned improvements are being implemented in schools and classrooms and how people are feeling about the implementation. The second level of evaluation is outcome-oriented. It concerns the impact of the improvement effort on student learning.

Implementation-Oriented Evaluation

At the implementation level, evaluation generally responds to three questions:

a. To what degree are planned improvements being put into effect?
b. What are teachers, administrators, or students' reactions to or concerns about the changes being implemented?
c. How could the implementation process be made better?

The first question, regarding the degree of implementation of planned changes, is answered most easily when the specific kind of changes you are looking for, and the specific tasks various people are expected to carry out, are clear. This topic was discussed in the last chapter on implementation. If, for example, you have clarified what kind of instructional plans teachers are expected to prepare in relation to a new district-adopted curriculum, then it's relatively easy to know what to look for in planning documents as evidence of implementation. This is not to suggest that you need to specify implementation tasks and responsibilities in a very detailed way or that you must prescribe only one way of doing something. (You may indicate several acceptable variations or options in carrying out a particular implementation responsibility). But it is to suggest that data collection about implementation is best guided by the district's implementation plan. If the plan is very general or vague, then it's difficult to develop a clear, sharply focused implementation evaluation.

Even if implementation tasks are well-specified, it's important to recognize that tasks can be carried out at different levels of sophistication and commitment. Hord and her colleagues (1987) have distinguished six levels of use of an innovation, summarized in Display 4-1. The levels range from non-use, through mechanical and routine use, through more creative and collaborative use. The particular framework for

categorizing levels of use shown in Display 4-1 need not be used, but some distinctions among levels generally is helpful. For example, you might identify several levels of implementing goal-based instruction as in the example below:

Level 1: Paper Compliance Only

Teachers write goals from the new curriculum guide in their lesson plan books, but there is little evidence that they understand the new ideas underlying the curriculum or are trying new or enhanced teaching strategies to accommodate the new ideas.

Level 2: Authentic Steps Toward Change

Teachers not only write goals from the new curriculum in their lesson plans, they show a serious effort to target instruction to the new strands in the curriculum and to use strategies that match these strands. Teachers may report that they are struggling a bit with the new content and strategies. However, they are making a good faith effort to try out the new ideas and appear hopeful about making them work.

Level 3: Internalization and Impact

Teachers understand the changes in the curriculum well and have effectively integrated new instructional materials and strategies that reflect these changes. They also have assessed and reflected upon the impact of these changes on their students' learning. Moreover, they have made, or are in the process of making, yet further changes in teaching content or strategies to improve student learning even more.

Obtaining information that allows you to make the kind of generalizations about levels of use shown above can be a challenge if time for data collection is limited, as it so often is. Perhaps the simplest way to collect such information is through grade level team or department meetings in which teachers are asked to report candidly on their own perceptions of level of use, providing as specific evidence as is feasible to support their perceptions. The aim of these meetings would NOT be to evaluate any individual teacher's level but for the group as a whole to reach a consensus on the general level of use that the grade level team or department has attained. As long as teachers know that their self-reports will not be used to evaluate their individual or team/department's

DISPLAY 4-1

LEVELS OF USE

0. Nonuse
   No action being taken.

1. Orientation
   Seeking out information about the innovation.

2. Preparation
   Preparing to use the innovation.

3. Mechanical Use
   Using the innovation poorly and making user-oriented changes (i.e., changes for sake of convenience or peace of mind, not to enhance effectiveness).

4. Routine Use
   Making few or no changes; stable pattern of use, but not stretching to achieve the maximum benefit.

5. Integration
   Making deliberate efforts to coordinate and collaborate with others.

6. Renewal
   Seeking more effective alternatives to established patterns of use.

professional effectiveness, but rather as an indicator of how well implementation is going and what aspects might need strengthening, then teachers can provide highly reliable and useful self-analyses of level of use.

In addition to, or alongside of, data on levels of implementation, it is helpful to collect data on teachers and administrators' reactions to the changes being implemented and their suggestions about how implementation might be strengthened. For example, teachers might express concern that an innovation is being "added on" to existing workloads without the prospect of reducing or eliminating other demands. Or teachers might suggest that more supplementary materials are needed in a certain area of the curriculum. The curriculum leadership council (see Chapter One) needs to review information coming from the implementation monitoring on a regular basis and respond to it as best it can.

Outcome-Oriented Evaluation

Outcome-oriented evaluation asks about the impact of an improvement on student learning. Whereas implementation evaluation is concerned with what educators are doing and feeling, outcome evaluation is concerned with what students are achieving. Generally, however, the assumption is made that the greater the degree of implementation, the higher the level of outcome attainment; implementation and outcome evaluation, while different in focus, thus complement each other.

Type of Assessments Used in a District's Outcome Evaluation

When planning outcome evaluations it's helpful to recall the distinctions discussed in Chapter Two between *curriculum-referenced* and *norm-referenced* measures and between *district-managed* and *teacher-managed* measures. For purposes of assessing the impact of a curriculum improvement on student learning, curriculum-referenced measures should carry more weight than norm-reference measures, simply because the former are designed to reflect the curriculum being implemented, whereas the latter are not. For example, if the main difference in your new math curriculum is that it introduces probability and statistics and visualization skills in geometry at the elementary grades, and you want to see whether your implementation effort is fostering increased student learning in these areas, a nationally standardized, norm-referenced test probably would not give you the

information you need, since it is not likely to contain test items on probability and statistics or visualization skills at the elementary level.

The distinction between *teacher -managed* and *district -managed* assessment also is relevant here. Teacher-managed assessments are those that individual teachers are responsible for, such as a book report that a teacher evaluates or a unit exam that he or she grades. These assessments reflect individual teachers' particular instructional emphasis and assessment practices.

In contrast, district-managed assessments are those that the school district is responsible for. District-managed assessments typically "standardize" the content of assessment, the conditions of administration, and the rules for scoring student responses so that there is a common measure of learning from one classroom to another and one building to another.

District-managed assessments play a larger role than teacher-managed assessments in a school district's outcome evaluation. This is because when a district seeks evidence on the impact of a district wide improvement effort on student learning, the unit of analysis is not an individual classroom but entire grade levels or a comparison across grade levels. If teacher-managed assessments were used as the primary data source, you would run the risk of comparing apples and oranges because the kind of assessments that one teacher uses may differ quite a bit from the assessments used by another teacher. District-managed assessments are more uniform than teacher-managed assessments and thus provide a more common information base from which to make inferences about student learning throughout the district.

It should be pointed out, however, that some states and school districts in this country have been exploring the use of portfolio assessments as a way of linking teacher and district-managed student evaluation. Portfolios consist of a series of writings or other products that students complete over an extended period of time. Entries in a portfolio are intended to represent a student's best work in a particular area. Portfolio assessments would be considered a form of curriculum-referenced assessment, since the tasks students complete for the portfolio reflect the particular curriculum a state or school district has adopted.

In Vermont, teachers and consultants are designing portfolio assessments and developing ways to score the contents of portfolios as part of a state-wide assessment project. Effort is being made to ensure enough consistency in the development of portfolios so that their contents can be meaningfully compared. At the same time, Vermont wants to preserve enough flexibility in its portfolio guidelines so that students and teachers can be creative in completing the portfolios. In essence, teachers and the state share in the management of the portfolio assessment.

Since the use of portfolios in program evaluation is so new, it is difficult to give concrete suggestions for carrying out this form of assessment. For now, perhaps the main point is that district-managed assessment programs do not have to rely exclusively on highly structured assessments that are administered in a single, timed setting. Steps can be taken to collect student writings and products that are produced during the course of instruction and examine them for evidence of learning accomplishments and program effectiveness. I do not think efforts of this type will entirely replace more structured evaluations of student learning, but such efforts seem highly promising as ways of enriching more traditional district-managed assessments.

Level of Generality of Scores

Assessments and evaluation criteria can be constructed to provide specific information on particular goals or they can be designed to provide more general scores. For example, a writing sample can be scored using an analytic scale that yields ratings along five or six dimensions of writing (e.g., content, organization, wording, sentence structure, conventions), or a sample can be scored using a holistic method that generates a single, global score. A reading comprehension test can be designed to yield a single score for reading comprehension, or the area of comprehension can be broken down into several subsections, such as literal, interpretive and evaluative comprehension, or into particular goal areas, such as "main idea" or "word meanings."

The degree of generality-specificity in assessment design and scoring depends on the use you wish to make of assessment information. If you want to be able to pinpoint specific areas of learning that need improvement, you need scores for each area in which you are interested. If you want a more general indicator of how students are doing in a subject area as a whole, you don't need to have as long or as detailed an

assessment or as specific a scoring system. For purposes of curriculum-related outcome evaluation, however, it is generally desirable to obtain information on specific strands or goal areas within the curriculum, since a general measure of learning may lack sensitivity to the specific types of curriculum changes you are making.

Display 4-2 provides an example of a how student performance in specific goal areas in writing might be reported across grades and years. Reports of this type enable you to pinpoint potential areas of concern in your curriculum and highlight specific areas of strength.

Standards Against Which Scores Will Be Interpreted

As discussed in the section on assessment in Chapter 2, scores can be referenced against a curriculum or against performance norms. Curriculum-referenced scores most frequently are reported in terms of a "mastery" standard, a point on a scale or a percentage correct on a test that is viewed as indicating goal attainment. A mastery standard might be 80 percent correct or a score of 4 on a 5-point rating scale say. Whether or not a student attains mastery does not depend on how well or poorly other students do. Conceivably, all students could attain mastery or none could. The key question in this case is where do students stand in relation to a set of criteria, not how much better or worse did they do than someone else.

Norm-referenced scores, by contrast, indicate how well students did in relation to others taking the test. A percentile score, for example, indicates where a student stands with respect to other test takers; conceivably a student could get many questions right or create a high-quality product or performance and still get a relatively low percentile score, if his or her "competition" was very keen. Norm-referenced scores do not tell what a student knows or can do, but whether a student performs better or worse than others.

In the context of curriculum improvement evaluations, curriculum-referenced scores are more useful than norm-referenced scores, since the main question guiding these evaluation is, "Are students achieving the outcomes called for in our new or revised curriculum?" The focus is not so much whether one student is more or less proficient than

DISPLAY 4-2
CHARTING GROWTH IN
STUDENT WRITING PERFORMANCE

Average Scores, Grades 3, 6, 8
On a District-Managed Performance Assessment

Scale, 2-8*
2 = Poor
8 = Outstanding

Grade Three

	Spring 1989	Spring 1990	Direction of change
Ideas	5.2	5.6	+
Organization	5.1	5.5	+
Wording	5.2	5.5	+
Sentence structure	5.0	5.1	+
Conventions	5.3	4.8	-

Grade Six

	Spring 1989	Spring 1990	
Ideas	5.8	6.5	+
Organization	5.0	6.0	+
Wording	5.4	5.6	+
Sentence structure	5.2	5.3	+
Conventions	5.2	5.6	+

Grade Eight

	Spring 1989	Spring 1990	
Ideas	5.3	5.4	+
Organization	4.8	5.2	+
Wording	5.1	5.6	+
Sentence structure	5.0	5.1	+
Conventions	5.0	5.8	+

*The actual scale used to score papers contained specific evaluative criteria for each of the five traits of writing assessed. Due to space considerations, however, only the general terms "poor" and "outstanding" are used here.

other students in the nation, but whether students are learning what is expected. In many Oregon school districts with which I am familiar, students often score well above the national average on a nationally standardized test, but still fall short of expectations for proficiency that the district has established.

If your district does wish to establish mastery standards for curriculum-referenced assessments, you may want to set progressively higher standards as the level of implementation of a new curriculum increases over a two or three year period. During the first year of implementation, it may be reasonable to expect, for example, only 60 or 70 percent of students at a particular grade to reach mastery standards in a new and complex learning area. By the end of the second year, perhaps the district might reasonably expect 80 percent of student to show mastery in this area.

A district may also vary standards for different areas of learning. For example, some areas may be so critically important, such as the ability to write a clear and coherent paragraph or the ability to carry out basic computational procedures, that the district would not be satisfied unless at least 90 percent of students at a particular grade showed mastery over these areas. Other areas, such as specific content knowledge in cell biology or European history, though important, might be less absolutely crucial for all students' future. The district might be satisfied if, for example, 75 percent of students showed mastery over these areas. In any case, whatever standards are set they should be continually examined to make sure they are fair and appropriate.

Special Groups of Students

You may wish to examine the impact of a curriculum improvement effort on particular groups of students (e.g., talented and gifted students, language minority students) as well as students in general. This can be a very important form of analysis, since a new curriculum may well affect some groups differently from others.

Using Information On Outcome Attainment

Unfortunately, evidence on the impact of curriculum improvement efforts often goes unused. One reason for this seems to be that in many cases neither time nor structures are provided to review this evidence and explore its implications for improvement. District personnel may be

unclear about who is to receive and review the outcome evaluation and when and how the review is to take place.

To facilitate the active use of outcome data, it's a good idea to assign formal responsibility for the review of outcome data either to the curriculum leadership council or a specially established evaluation group. The council would be expected to set aside time in the spring of each year to review outcome data and to determine performance strengths and weaknesses. When weaknesses are uncovered, the group might ask that additional groups be established at the building levels or in particular grade levels or departments to "troubleshoot" for causes of performance shortfalls. This "troubleshooting" usually is facilitated if the group has good data on levels of implementation, since problems in implementation often help to explain lower than expected levels of outcome attainment. However, the reasons for low performance also may have to do with problems in the measures being used to assess learning, in the curriculum itself, or in inappropriately high mastery standards. The point being made here is that time and support need to be provided for teams of teachers and administrators to take a close look at outcome data and make sense and order out of it.

Additional Resources

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APPENDIX A

A FORM FOR SHOWING THE INSTRUCTIONAL ATTENTION THE ESSENTIAL LEARNING SKILLS ARE TO RECEIVE IN DIFFERENT SUBJECT AREAS

A FORM FOR SHOWING THE INSTRUCTIONAL ATTENTION THE ESSENTIAL LEARNING SKILLS ARE TO RECEIVE IN DIFFERENT SUBJECT AREAS

xx = This program is primarily responsible for developing this skill
x = This program contributes to the development of this skill
0 = This program makes little or no contribution to the development of this skill

Summary of Essential Learning Skills	LANGUAGE ARTS	MATH	SCIENCE	SOC STU	HEALTH	P. E.	ART	MUSIC
1. Use vocabulary, speech, numerals, and other symbol systems.								
1. Recognize common words.	___	___	___	___	___	___	___	___
2. Determine word meanings.	___	___	___	___	___	___	___	___
3. Speak with standard pronunciation and appropriate volume, rate, gestures, inflection.	___	___	___	___	___	___	___	___
4. Count, compute and communicate quantitative information.	___	___	___	___	___	___	___	___
5. Recognize and use geometric patterns and principles to describe, classify, and interpret data.	___	___	___	___	___	___	___	___
6. Recognize and use mathematical patterns and principles (including those dealing with probability and basic statistics), to quantify problems (e.g. construct graphs and tables) and to make predictions.	___	___	___	___	___	___	___	___
7. Estimate and measure quantities, define problems, and develop and carry out problem solving plans.	___	___	___	___	___	___	___	___
2. Interpret the literal meaning of information expressed orally, visually, or in writing.								
1. Identify main ideas, supporting details, and facts and opinions.	___	___	___	___	___	___	___	___
2. Use specific aspects of a book (e.g., table of contents, guide words in a dictionary, charts and graphs) to gain knowledge and aid comprehension.	___	___	___	___	___	___	___	___
3. Give and receive information and directions using variety of speaking and listening skills.	___	___	___	___	___	___	___	___

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Summary of Essential Learning Skills (continued)	LANGUAGE ARTS	MATH	SCIENCE	SOC STU	HEALTH	P. E.	ART	MUSIC
3. Interpret implied meanings.								
1. Comprehend implied meaning of written, oral, and visual communication.*								
a. Relate new information to previous knowledge.	___	___	___	___	___	___	___	___
b. Draw logical conclusions.	___	___	___	___	___	___	___	___
c. Compare literal and implicit meanings.	___	___	___	___	___	___	___	___
d. Infer cause and effect relationships.	___	___	___	___	___	___	___	___
e. Predict probable outcomes or actions.	___	___	___	___	___	___	___	___
f. Recognize and interpret emotional and intellectual subtleties in communication (e.g. as evidenced by body language and tone.)	___	___	___	___	___	___	___	___
4. Evaluate content and use written, oral, aural, and visual communications.								
1. Determine the significance and accuracy of information.	___	___	___	___	___	___	___	___
2. Use oral communication to influence others and to respond to persuasion.	___	___	___	___	___	___	___	___
3. Distinguish and interpret sounds of nature, language, music and the environment..	___	___	___	___	___	___	___	___
4. Listen, read, view, and evaluate presentations of the mass media..	___	___	___	___	___	___	___	___

*In the original state document, only one major skill statement (3.1) is listed under the broad heading "Interpret Implied Meanings." (All other broad headings are followed by at least three major skills.) To provide comparable detail under the implied meaning heading as under the other headings, various subskills, identified with letter codes, have been included here under implied meaning.

A FORM FOR SHOWING THE INSTRUCTIONAL ATTENTION THE ESSENTIAL LEARNING SKILLS ARE TO RECEIVE IN DIFFERENT SUBJECT AREAS

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	LANGUAGE ARTS	MATH	SCIENCE	SOC STU	HEALTH	P. E.	ART	MUSIC
Summary of Essential Learning Skills (continued)								
5. Generate, organize, express and evaluate ideas.								
1. Use a variety of techniques to generate writing and speaking topics.	____	____	____	____	____	____	____	____
2. Organize ideas in understandable formats.	____	____	____	____	____	____	____	____
3. Select an appropriate form of writing based on audience and purpose.	____	____	____	____	____	____	____	____
4. Present ideas in an understandable sequence.	____	____	____	____	____	____	____	____
5. Select and use language, gestures, and symbols appropriate to audience, purpose, topic and setting.	____	____	____	____	____	____	____	____
6. Evaluate and revise own writing.	____	____	____	____	____	____	____	____
7 Edit and proofread.	____	____	____	____	____	____	____	____
6. Use reasoning skills.								
1. Draw inferences and make classifications and comparisons.	____	____	____	____	____	____	____	____
2. Generate and test interpretations, explanations, predictions, and hypotheses.	____	____	____	____	____	____	____	____
3. Identify and define problems and develop and carry out problem solving plans.	____	____	____	____	____	____	____	____
4. Make reasoned evaluations.	____	____	____	____	____	____	____	____
5. Formulate and support positions.	____	____	____	____	____	____	____	____
6. Reflect upon and improve own reasoning.	____	____	____	____	____	____	____	____

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A FORM FOR SHOWING THE INSTRUCTIONAL ATTENTION THE ESSENTIAL LEARNING SKILLS ARE TO RECEIVE IN DIFFERENT SUBJECT AREAS

xx = This program is primarily responsible for developing this skill
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	LANGUAGE ARTS	MATH	SCIENCE	SOC STU	HEALTH	P. E.	ART	MUSIC
Summary of Essential Learning Skills (continued)								
7. Manage personal habits and attitudes, time, and instructional resources to accomplish learning tasks.								
1. Clarify the purposes of an assignment.	____	____	____	____	____	____	____	____
2. Use resources outside the classroom.	____	____	____	____	____	____	____	____
3. Select and use appropriate study techniques.	____	____	____	____	____	____	____	____
4. Practice appropriate health behaviors to enhance learning.	____	____	____	____	____	____	____	____

APPENDIX B

WORKSHOP SUPPLEMENT

WORKSHOP SUPPLEMENT TO THE
CURRICULUM LEADER'S HANDBOOK

A GUIDE TO FINDING KEY STRATEGY OPTIONS DISCUSSED IN THE HANDBOOK

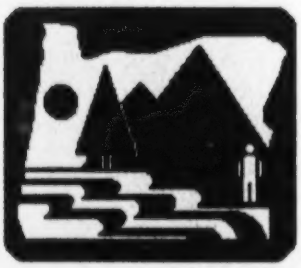
Key Options	Advantages/Disadvantages	Pages in Handbook
Planning		
Choose a within-district or a consortium-approach to curriculum development.	A within-district approach optimizes local control and responds directly to local needs. A consortium-approach provides for a broader range of ideas in the development process and is generally more cost-effective for smaller districts. Consortium-based development may take more time than district-managed development, however, and may require that local districts adapt what the consortium produces to match specific local needs.	5-6
Treat different subject areas the same or differently.	Some districts give the same amount of time and energy to curriculum development in each subject area. This ensures that each subject receives an equal share of attention in the improvement process. An alternative is to assign subjects different priorities for curriculum development and to allocate time and resources for development accordingly. This strategy makes sense whenever some subjects clearly are in more need of attention than others.	4-5

Key Options	Advantages/Disadvantages	Pages in Handbook
Structuring the Curriculum		
Include only "mastery" goals in the curriculum or both mastery and "organic" goals.	"Mastery" goals are clearly focused and measurable. They emphasize essential content and skills. The mastery curriculum is "lean" and relatively manageable. "Organic" goals are broader than mastery goals and generally focus on affective development. Including organic goals makes for a "richer" curriculum. However, organic goals are hard to teach and measure.	7-9
Limit the time demands of the district-required curriculum to 2/3 or 3/4 of teachers' total teaching time, or develop a curriculum without setting such time limits.	There are two advantages of setting limits on the time demands of the district's curriculum. One is that people writing the curriculum are forced to ask tough questions not only about what students should ideally learn, but about what they realistically can be expected to learn within a specific time frame. Setting time limits on the district's curriculum also allows individual schools and teachers to plan a portion of the curriculum themselves, thus enabling them to respond to distinctive curricular needs and interests at the classroom or building levels. There are two main reason why some educators choose not to set time limits on the district's curriculum. One is that it may appear articifical to do so. This is especially the case when the curriculum emphasizes broad critical thinking and problem solving skills which permeate teaching and learning and are hard to limit to specific blocks of of time. (It is possible, however, to set general time limits on the district's curriculum and then simply to note those broad and pervasive areas of learning, like critical thinking, for which time limits may not apply.) Another reason why some educators choose not to set time limits on the district's curriculum is that the state's common curriculum goals are so extensive and wide ranging that in most districts teachers need all the instructional time available to teach these state-mandated goals.	9-10

Key Options	Advantages/Disadvantages	Pages in Handbook
Developing the Curriculum		
Create your own curriculum, or adopt/ adapt a curriculum produced elsewhere.	When a district (or a consortium of districts) creates its own curriculum, it gives staff a chance to be in the driver's seat of curriculum change. Staff who create a curriculum generally gain a greater understanding of new curriculum content and of the process of curriculum development in general than those who adopt/ adapt someone else's curriculum. Also, when staff build their own curriculum, they can "customize" it to meet specific local needs and interests. However, creating a curriculum is relatively time consuming. If not managed well, this process can lead to teacher "burn out." Adopting/adapting a curriculum developed elsewhere is less demanding of staff time and energy. This approach avoids reinventing the wheel. It doesn't lead to as much learning and growth on the part of staff, however, as when a district (or a consortium) creates its own curriculum. Also, it may not be as responsive to local needs.	18-21
Selecting Texts		
Use a consortium to do initial screening of texts, or carry out the entire text selection process within-district.	If your district is involved in a consortium for curriculum development (see page one of this supplement), this same group can be asked to review all the texts on the state-adopted list and select a few finalists on the basis of the texts' match with the curriculum that has been developed. Individual districts can then focus their evaluation on the finalists, rather than having to evaluate each and every text on the adopted list. (Even if a consortium has not been previously established, one could be created for the express purpose of initial text screening.) However, districts that already have a text screening and evaluation process in place may find it constraining and overly time consuming to enter into a consortium for text screening.	43-44

Key Options	Advantages/Disadvantages	Pages in Handbook
Developing Assessments		
Focus first on teacher-managed, classroom level assessment and then move to program assessment, or reverse this sequence (move from the program level to the classroom level).	Teachers often need new or additional assessment resources (e.g., checklists, rating scales, project evaluation procedures, tests) to measure what is called for in a new or updated curriculum. At the same time, districts often need new or additional assessment resources (e.g., procedures for collecting and scoring student writing samples from different classrooms and grade levels) to evaluate the effectiveness of a program as a whole. Both the classroom assessment needs of teachers and the program assessment needs of districts are equally important. In fact, each type of assessment can and should support the other. However, it is very difficult to develop assessment resources for the classroom and program levels at the same time. You probably will have to target initial development work (which generally will involve adapting or extending assessment procedures produced elsewhere) at one level rather than both levels. The advantage of beginning at the classroom level is that this provides immediate support for teachers in their week-to-week assessment efforts. The possible risk is that when schools start at this level they often get so immersed in short-term, individual classroom assessment activities that they lose sight of the need for broader, more cumulative, and more formal assessments that help evaluate and improve a program as a whole. The advantage of beginning at the program level is that this immediately focuses attention on long-term learning across grades and classrooms. Results from program assessments can help the the district identify priorities for improvement in learning, which in turn may help teachers set their own priorities for teaching and assessing in the classroom. The disadvantage of beginning at the program level is that this may leave many teachers	54-55

Key Options	Advantages/Disadvantages	Pages in Handbook
	wondering about when and where they will receive the resources in assessment they need to measure students' learning on a week-to-week basis.	
Implementation		
Focus the first year of curriculum implementation either on instruction alone or on the integration of instruction and assessment.	On the one hand, it makes sense to concentrate first on instruction by itself, since teachers typically are concerned with understanding and managing the instructional implications of a curricular change before dealing with implications for assessment. On the other hand, the Oregon Standards place such emphasis on the integration of instruction and assessment in relation to goals that it can be helpful from the very beginning of the implementation process to deal with instruction and assessment as closely linked partners. Learning about instruction and assessment together can enhance each of these processes.	75



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